



INSIDE
GEORGE RUSSELL
STILL HE RISES

LAST OF THE MOHICANS

Why Kimi's retirement is truly the end of an era

THE BOSS WILL SEE YOU NOW...

... time for our meeting with Lawrence Stroll

MAX VERSTAPPEN EXCLUSIVE!

WHATEVER IT TAKES...

...RED BULL'S MAIN MAN ON GOING ALL OUT TO BEAT LEWIS

+ GO HARD OR GO HOME

How Red Bull is taking it to Mercedes



UK £5.99
NOVEMBER 2021





NOT MADE FOR PROFESSIONAL RACING DRIVERS.*

*Although they have just as much fun in it as you will.



**It's so much easier
to drive than you think.**

For the car enthusiast who has a sweet tooth for the track life. Designed and engineered for ease of use and maximum entertainment. Able to be driven to comfortably suit your driving style and ability. Not just for racing drivers.

Perfect for track days.

VIEWING BY APPOINTMENT AT
DONINGTON PARK, UNITED KINGDOM

RODIN-CARS.COM



**RODIN
FZED**





Product of the environment

When polar ice melts, it harms habitats as far away as Asia and Africa. In 2022, conservationist (and Christopher Ward Challenger) Tom Hicks will lead an expedition to the North Pole to measure ice melt rates for the David Shepherd Wildlife Foundation (DSWF). On his wrist will be the C60 Anthropocene GMT. Able to monitor two time zones at once, waterproof to 600m and with a sapphire dial that recalls polar ice, it can withstand whatever the Arctic throws at it. And with five percent from the sale of each watch going to DSWF, it's playing its own part in the fight against climate change.



**Christopher
Ward**

Ingeniously English.
Unsurprisingly Swiss.

christopherward.com



1 ETON STREET, RICHMOND,
LONDON, TW9 1AG, UK

CONTENTS

NOVEMBER 2021



SECTOR 1

- 6 IGNITION**
All or nothing time for Verstappen and Red Bull
- 8 PARADES**
The best pics from Russia and Turkey
- 18 F1 INSIDER**
VW Audi looking at new engine rules; Alfa's second seat
- 24 F1 ANALYST**
Ben Edwards on the talented Nico Hülkenberg
- 26 UNDER THE HOOD**
Pat Symonds on the challenge of new tracks

SECTOR 3

- 92 SUBSCRIPTIONS**
Three issues for just £3
- 94 REPORTS**
From the Russian and Turkish GPs
- 100 PREVIEWS**
Of Mexico City, US and São Paulo GPs
- 104 PRODUCTS**
Reviews of the best F1 gear
- 106 FLAT CHAT**
Stuart Codling on personnel burnout in F1



UNBREAKABULL BOND

As Red Bull and Honda go all-out for victory in the final season of the Japanese engine manufacturer's longest alliance with Formula 1, Max Verstappen finds himself thrust into a compelling and controversial title fight with Lewis Hamilton. As Max focuses on his ultimate goal, being at Red Bull increasingly seems the perfect fit for a driver who is in no mood to compromise

36

COVER STORY: EXCLUSIVE INTERVIEW WITH MAX VERSTAPPEN




Pure Bull

After spending three difficult seasons in the shadow of Mercedes, Red Bull and Max Verstappen are finally ready to go for the title. But the team's aggressive approach has led to controversy, with some questioning the team's tactics and the driver's behavior. In this exclusive, we explore the team's strategy and the challenges they face.

46

RED BULL: BATTLING HARD FOR GLORY



SILVER BULLET

George Russell's ascent is almost complete, as he gets to become team-mate to seven-time champion Lewis Hamilton, at Mercedes in 2022. Russell's made a big splash since joining the F1 grid in 2018, but Mercedes knew much earlier that it had a real star on its hands.

56

WHERE RUSSELL'S MERCEDES JOURNEY REALLY STARTED



THE BOSS WILL SEE YOU NOW

Within five years, Aston Martin plans to challenge for the world championship. A goal easily stated, somewhat more challenging to achieve. But do you want to argue with Lawrence Stroll?

64

EXCLUSIVE: LAWRENCE STROLL INTERVIEW

SECTOR 2

- 36 MAX VERSTAPPEN**
Max explains his no-compromise approach to winning and why Red Bull is a perfect fit for him
- 46 ON THE ATTACK**
Why 2021 represents Red Bull's best chance of fresh title success
- 56 GEORGE RUSSELL**
How Mercedes' new driver first attracted the team's attention
- 64 LAWRENCE STROLL**
Outlines his aggressive road map to success for Aston Martin
- 72 KIMI RÄIKKÖNEN**
A personal perspective on the retiring 2007 world champion
- 76 MOTORSPORT SHOWCASE**
Highlights some great Kimi images from his long career
- 84 NIGEL ROEBUCK'S HEROES**
Nelson Piquet, a triple world champion and all-time great
- 86 NOW THAT WAS A CAR**
Ambitious, but ultimately flawed: the Vel's Parnelli Jones VPJ-04

F1 PRO

- 31 STRAIGHT TALK**
Mark Gallagher looks at the return of Martin Whitmarsh to Formula 1 with Aston Martin
- 32 PROFILE**
Laurent Rossi, Alpine CEO and one of its three team principals
- 34 SHADOW STUDIO**
The physical result of McLaren's continued investment in Esports



Verstappen and Red Bull go all in

Who knew a set of temporary, emergency rule changes, designed principally to arrest development of cars meant to be scrap already, in order to protect the integrity of tyres never meant to go on this long, would produce the most compelling Formula 1 season in almost a decade?

I would argue this is as exciting a title fight as F1 has seen since 2012, when Sebastian Vettel inexplicably survived a first-lap collision with Bruno Senna at the final race in Brazil to beat Fernando Alonso to the prize. But in terms of what it could mean for F1 should Max Verstappen topple Lewis Hamilton, what we have now is a situation more akin to 2005-06, when Alonso and Renault finally ended Michael Schumacher's streak.

Even that analogy has limits, because Ferrari was suddenly uncompetitive in 2005, Schumacher won only once, and McLaren's Kimi Räikkönen was Alonso's closest challenger. Only in 2006 did Alonso and Schumacher engage in a full-blooded battle that went all the way to the wire. But in terms of rule tweaks upsetting the established dominance of one team – in 2005, tyres designed to last full race distances – plus a young pretender racing hard to overthrow a long-reigning king, there are clear parallels to what we're seeing in 2021.

Earlier this year we explored the perfect storm that's made this the most challenging season for Hamilton and Mercedes since they began cleaning up at the start of F1's hybrid era. This month, we

look at the other side of that coin.

First up, an exclusive interview with Verstappen (page 36). That Max possesses incredible skill and immense self-belief has never been in doubt, but only now does he have equipment to match his ambition. As irresistible force meets immovable object on track, the racing has been hard and controversial, but the fact Red Bull rallies around its man no matter what only solidifies their bond.

Red Bull, Honda and Verstappen are throwing everything at trying to win Max's first championship, and Red Bull's first since 2013. As Andrew Benson explains on page 46, the team has lost none of its cutting edge in the intervening fallow period – and is prepared to do whatever it takes to get over the line.

Toto Wolff often mentions the threat Ferrari posed when last the rules changed significantly. But Vettel didn't drive as well through 2017-18 as Verstappen is now, nor was Ferrari as operationally or developmentally sharp as Red Bull-Honda.

The result is a fascinating, generational battle for the ages, with the sort of hard edge we haven't really seen since Ferrari and McLaren went at each other full pelt in the late-90s and 2000s, and a rivalry between driving protagonists on a level F1 probably hasn't known since Alain Prost and Ayrton Senna a decade earlier.

What a way to sign off, before the regulations change again for 2022.

Contributors



OLEG KARPOV

Oleg snared an exclusive chat with Max Verstappen as the Dutchman goes full pelt in pursuit of his first title. See the results on p36



ANTHONY PEACOCK

PR for Kimi Räikkönen's rally team in 2011 and still a friend of the Finn, Anthony explains why Formula 1 will miss the retiring Iceman (p72)



ANDREW BENSON

BBC Sport's chief F1 writer analyses exactly how Red Bull has levered itself into championship contention (p46)



STEWART BELL

Melbourne-based journalist Stewart reveals just how long George Russell has been on Mercedes' F1 radar (p56)

Team principals

Editor
Ben Anderson
President, Motorsport Network
James Allen
Vice President of editorial
James Dickens

Drivers

Group managing editor
Stewart Williams
Executive editor
Stuart Codling
Art editor
Frank Foster
Editorial tel
+44 (0)20 3405 8100

Pit crew

Principal photographer
Steven Tee
Columnists
Pat Symonds
Mark Gallagher
Nigel Roebuck
Ben Edwards

Photo agency
Motorsport Images
Director, global client success
Sunita Davies
Production controller
Ben Webster

Advertising

Head of print advertising
Ben Fullick
ben.fullick@autosport.com
Sales executives
Thomas Howatt
thomas.howatt@autosport.com
Kieran Rennie
kieran.rennie@autosport.com

Subscriptions

Email: help@asm.secureorder.co.uk
Customer hotline/back issues
0344 848 8826
Subscriptions marketing executive
Matt Sleight



Circulation queries Seymour Distribution Ltd, 2 East Poultry Avenue, London EC3A 9PT. Tel: +44 (0)20 7429 4000. Fax: +44(0)20 7429 4001. Email: info@seymour.co.uk ISSN 2633-8157 (print) ISSN 2633-8165 (online) EAN 07713614480012. Printed by William Gibbons & Sons Ltd, 28 Planetary Road, Willenhall, Wolverhampton WV13 3XT. © 1996 Autosport Media UK.

Reproduction in whole or in part of any photograph, text or illustration without written permission from the publisher is prohibited. Due care is taken to ensure that the content of GP Racing is fully accurate, but the publisher and printer cannot accept liability for errors and omissions. GP Racing is a member of the Audit Bureau of Circulations. We abide by the Editors' Code of Practice and are committed to upholding the highest standards of journalism. If you think we haven't met those standards and want to make a complaint, contact 0203 405 8100. Autosport Media UK Ltd is a part of Motorsport Network LLC.

Subscriptions GP Racing subscriptions, Autosport Media UK, 3 Queensbridge, Northampton, NN4 7BF, UK. Email: help@asm.secureorder.co.uk. Tel: 0344 848 8826. Overseas Tel: +44 (0)1604 251 454. GP Racing ISSN 2633-8157 (USPS 25188) is published monthly by Autosport Media UK, 1 Eton Street, Richmond, TW9 1AG, UK. The US annual subscription price is US\$68.37. Airfreight and mailing in the USA by agent named WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Periodicals postage paid at Brooklyn, NY 11256. US Postmaster: Send address changes to GP Racing, WN Shipping USA, 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA. Subscription records are maintained at Autosport Media UK, 1 Eton Street, Richmond, TW9 1AG, UK. Air Business Ltd is acting as our mailing agent.

Thanks to Matt Bishop, Michael Clayton, Steve Cooper, Lucy Genon, Clarisse Hoffmann, Gemma Lusty, Will Ponissi, Katharina Rees



IS POWERED BY

motorsport
NETWORK



ventus S1 evo³

Powerful grip and superior handling for high performance cars.



tyrereviews.com
Highly Recommended
Hankook Ventus S1 evo³





It's McLaren vs Ferrari again

Being able to go on the grid (see over the page) meant passing up the opportunity to go out on track on race day in Turkey, such as the Covid protocols, but I was able to go up on the roof of the pit building. I knew the start of the race would be wet so there would be a lot of spray down the main straight, adding a nice graphical effect to otherwise straight panning shots.

Only a couple of laps in and Carlos Sainz and Daniel Ricciardo came past side by side. It's great to see the classic McLaren vs Ferrari battle being renewed and the spray added to the dramatic effect. Shame there wasn't a single frame where both the cars' red lights were on...



Photographer
Glenn Dunbar

Where Istanbul, Turkey

When 15:04pm, Sunday
10 October 2021

Details Canon EOS-1DX MkII
70-200mm lens, 1/200th @ F6.3





Smoke and mirrors on the grid

We're now allowed onto the grid again, and I've been trying to make the most of it.

For wet races the team erects a gazebo over the car on the grid to keep the electronics dry, and this creates an unusual lighting effect which I wanted to capture. It's quite dark and moody, with the highlights picked out by the available light. It's standard procedure for the mechanics to attach blowers filled with dry ice to keep the car cool, and perhaps because of the atmospheric conditions there was quite a lot of vapour in the air.

I went for a low angle, side-on, and Lance kept his visor shut, which I think adds a kind of gladiatorial aspect to this shot.



Photographer
Glenn Dunbar

Where Istanbul, Turkey

When 14:31pm, Sunday
10 October 2021

Details Canon EOS R5
28-70mm lens, 1/2000 @ F2

Painting the town red and white

Since Istanbul Park isn't the most photogenic of circuits in terms of background – it's out in a fairly nondescript area of countryside and the trackside infrastructure looks a bit cluttered – you tend to look for areas where the cars are running under duress. This angle, at the exit of the final corner, makes use of the kerb and track to give a graphic composition.

This weekend wasn't a great one for McLaren since the nature of the track didn't really suit the car, so the drivers were hustling to find lap time wherever they could. Both the drivers were leaning on the cars noticeably more than their rivals here, going wider and tearing off chunks of red and white paint.



Photographer
Mark Sutton

Where Istanbul, Turkey

When 15:30pm, Friday
9 October 2021

Details Nikon D6
200-400mm lens, 1/1600 @ F8









On the spot for the race-winning call

As a sports photographer you always aspire to be in the right place at the right time to capture a decisive moment. Naturally it doesn't always happen because sport can be so gloriously random, but at other times that same unpredictability gives you a bit of a free gift.

Towards the end of the race, when the order looks set, you tend to make your way to a place where you can get an angle on the parc fermé celebrations. In Sochi there's a grandstand opposite the pits where you can get a bit of elevation which also gives a good perspective on any pitstops – and there were plenty of those in the final minutes, including the race-winning one for Lewis Hamilton.



Photographer
Charles Coates

Where Sochi, Russia

When 16:26pm, Sunday
26 September 2021

Details Canon EOS-1DX MkII
70-200mm lens, 1/500th @ F5

Turkey Turn 8: a sparkling corner

It might be regarded as one of Hermann Tilke's finest works, lauded by drivers as an exciting test of finesse and bravery (and car grunt and grip), but Turn 8 at Istanbul is a tough place to photograph. Trackside, you get a magnificent sense of how fast the cars are travelling through this triple-apex left-hander; watch it on TV and you may wonder what all the fuss is about.

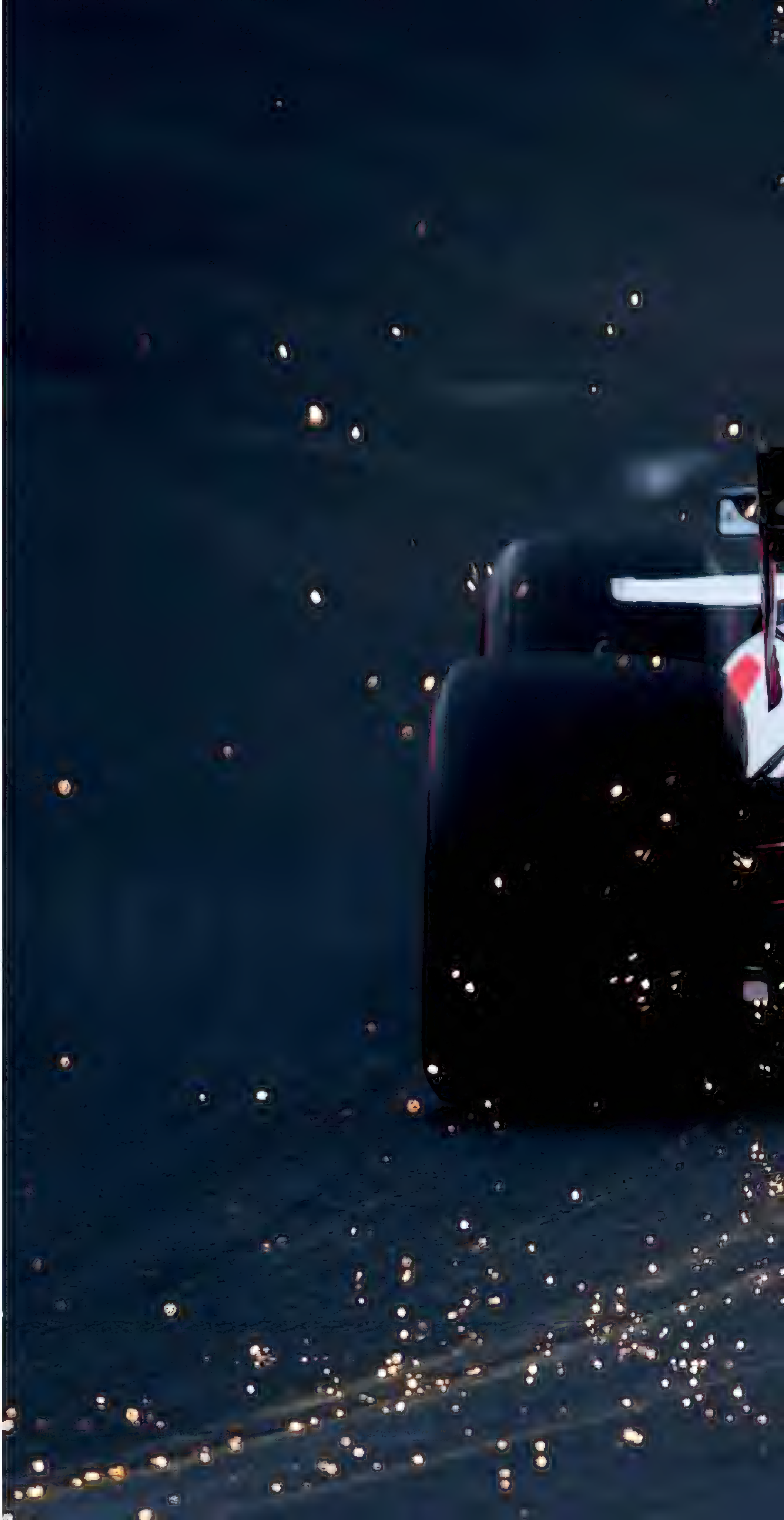
F1 cars don't lean over that much, even at high cornering speeds, but you can always count on a Red Bull to deliver a nice shower of sparks from its skid plates – and, here, the high humidity generated some interesting vortices around the top of the rear wing.



Photographer
Zak Mauger

Where Istanbul, Turkey
When 15:26pm, Saturday
9 October 2021

Details Canon EOS-1DX MkII
600mm lens, 1/1600th @ F5.6



ありがとう



VW GROUP LINKED TO FUTURE F1 ENTRY

01 New rules aimed at making engine development less expensive are expected to attract manufacturers to F1 – and open the possibility of the Porsche name returning to the grid for the first time in 30 years. The Volkswagen Group, which includes the Porsche and Audi brands, is understood to have been closely involved in discussions concerning the next engine formula, due for introduction in 2026.

While the formula has yet to be finalised, a consensus has been achieved over certain elements that senior VW figures have described as prerequisites for committing to an engine program. Adoption of so-called ‘e-fuels’ is one, while the other – more controversial – is the deletion of part of the hybrid system.

From 2026 the MGU-H will be removed. F1’s current power unit suppliers – Mercedes, Ferrari, Renault and Honda – have a complex and troubled relationship with this hybrid element, which recovers energy from the exhaust to enable the turbocharger to carry on spinning while the driver is off the throttle, eliminating so-called ‘turbo lag’. It has helped F1 power units to reach unprecedented levels of fuel efficiency while enhancing performance and driveability, but is costly and expensive to get right. Ferrari, Renault, and Honda to an even greater extent, took much longer than expected to perfect the technology.

The key challenge with the MGU-H is that it is expected to run at speeds of around 125,000rpm while in close proximity to sources of extreme heat, placing the bearings under enormous duress. During the 2017 season Honda admitted its MGU-H could only last two races.

For similar reasons the technology has not found favour across the wider automotive industry, making it largely irrelevant outside Formula 1 – where it acts as a significant barrier to entry. Only a brave and/or deep-pocketed car manufacturer would contemplate pitting its engineering resources against opposition who in some cases have a decade’s head start. Mercedes started work on its hybrid project in 2010.

But this is also why the current F1 power unit manufacturers have dragged their feet on the issue of the MGU-H. Having invested huge sums in it, they were unwilling to consign it to the dustbin of history without a fight – especially if the purpose of getting rid was to facilitate more competition. So, they have won key concessions during the talks: the general principle of hybrid power will remain, and horsepower levels will be



PICTURES: MERCEDES; MOTORSPORT IMAGES ARCHIVE



Mercedes engines (above) have dominated the hybrid era, but the new formula for 2026, minus the MGU-H, is expected to attract interest from VW with its Porsche or Audi brands

IN THEORY THIS WILL MAKE THE NEXT GENERATION OF POWER UNITS LESS COMPLEX AND LESS COSTLY TO DEVELOP

sustained by allowing the MGU-K (which recovers energy from the rear axle under braking) to contribute more.

In theory this will make the next generation of power units less complex and, most importantly, less costly to develop, presenting a lower barrier to entry. There will also be restrictions on in-season development, along with a budget cap. But a proposal to grant new entrants concessions

on budget and development to enable them to reach similar performance to established suppliers has been rejected.

F1 also plans to introduce net-zero carbon fuel in 2026, but the means of producing it has yet to be decided because the fuel suppliers haven't reached a consensus. Some favour fuels made from biomass, such as waste oils and oil-seed crops, or other bio-waste. These are classed as carbon neutral because they derive from the products of photosynthesis so, when burned, the carbon dioxide they release is equal to the amount they absorbed from the atmosphere while growing.

Synthetic e-fuels, on the other hand, combine hydrogen with carbon dioxide drawn from the atmosphere, so when it burns it is simply returning that carbon dioxide whence it came. But the production process is itself energy intensive, so unless that energy comes from sustainable sources it defeats the object.

As *GP Racing* reported in March when news of VW's interest in F1 began to circulate, Porsche is investing in a new e-fuel manufacturing facility in southern Chile which will use a

mixture of solar and wind power.

One thing is certain: while the road-car market is gravitating to full electrification, F1 won't be going there any time soon. ▶



GIOVINAZZI FIGHTS TO KEEP ALFA SEAT

02 While Valtteri Bottas will move from Mercedes to become Alfa Romeo team leader next year, the identity of the driver in the second seat had yet to be announced as this issue of *GP Racing* closed for press. While Alpine junior Guanyu Zhou was believed to be the likeliest candidate for that position, *GP Racing* understands that this is by no means a done deal. Formula 2 frontrunner Oscar Piastri, who had all but given up on finding an F1 seat for 2022, may yet find himself in the Alfa drive – or the incumbent Antonio Giovinazzi may cling on for another season.

Alfa Romeo is no longer contractually committed to having a member of the Ferrari Driver Academy. Giovinazzi has been sporadically quick during his three seasons in F1, but seldom convincingly outperformed the fading Kimi Räikkönen. He also has a habit of making small but costly mistakes, such as when he shunted out of eighth place in the closing laps of the 2019 Belgian GP. But his qualifying performances have markedly improved recently, and he reached Q3 at Zandvoort and Monza.

Twenty-two-year-old Zhou is on Alpine's junior driver programme but no vacancies exist at that team, since Esteban Ocon is on a long-term contract and Fernando Alonso recently agreed a one-year extension which takes the double world champion to the end of 2022. Zhou has shown well in F2 this season and has a portfolio of sponsors eager to be on board with the first Chinese driver to race in Formula 1.

However, *GP Racing* understands the key stumbling

Although currently behind Alpine junior Guanyu Zhou in the pecking order, incumbent Antonio Giovinazzi (above) could yet hang onto his Alfa drive



block is that Zhou and his backers want a three-year contract. This is incompatible with team principal Frédéric Vasseur's desire to promote Théo Pourchaire, who is part of the junior driver scheme operated by Sauber, which runs its F1 team under the Alfa Romeo banner. The 18-year-old Frenchman won the ADAC Formula 4 series in 2019 and was second in the curtailed FIA F3 championship last year. Vasseur has said 2022 would be too early for Pourchaire to make his F1 debut. But if Zhou has a three-year contract there would be no seat for Pourchaire to fill come 2023, unless Bottas were to be evicted in his favour. This is highly unlikely.

With the two sides seemingly at loggerheads, Piastri has once again entered the equation. Like Zhou, he is on Alpine's junior books. Although he told *GP Racing's* sister site *Motorsport.com* at the end of September that he was "not very confident" of securing the second Alfa seat, and that he was likely to spend 2022 on the sidelines – potentially as Alpine's reserve driver – Piastri could easily slot in if Zhou and his backers deem a one-year contract unacceptable.

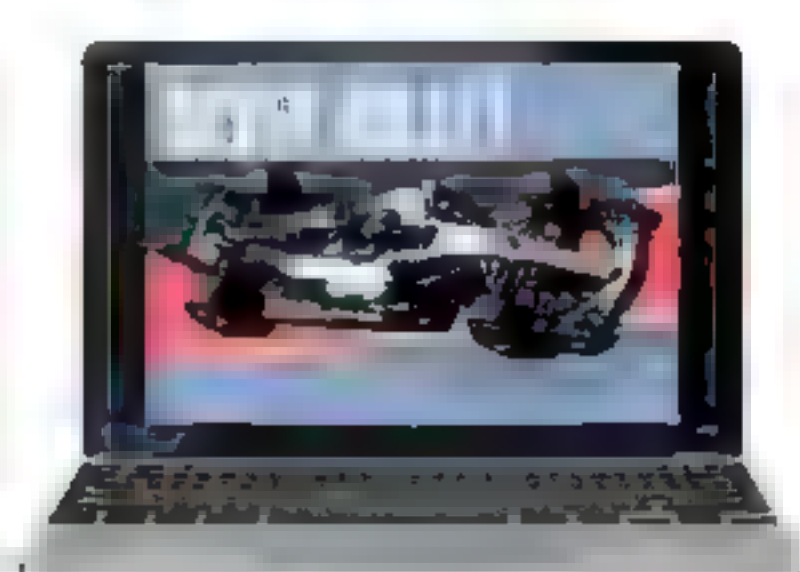
Currently, Vasseur holds all the cards. Piastri is leading Zhou in the F2 standings by 178 points to 142 and there will be no more races until the Saudi Arabia/Abu Dhabi double-header in late-November/early-December. Thus plenty of time for interested parties to sharpen their contractual pencils. No wonder Vasseur describes his situation as a "luxury problem". ▶

THIS
MONTH

GET THE WORLD'S
BEST F1 MAGAZINE
WHEREVER YOU ARE



★ Download and read it on your PC, Mac or iPad



★ It's identical to the print edition



★ On sale the same day as the print edition

Go to www.gpracing.com/digital-edition/

NEXT
MONTH*

ON SALE

NOV
18



THE BRILLIANCE OF CHARLES LECLERC

- ▶ Daniel Ricciardo: the road to McLaren success
- ▶ The Long Interview with James Allison
- ▶ He's back. Alexander Albon on his return to F1
- ▶ Now That Was A Car: McLaren MP4-15

PICTURE: CHARLES COATES, ALFA ROMEO
*CONTENTS MAY BE SUBJECT TO CHANGE

Are you a huge font-er?

If you're fed up with being a huge-font-er or a read-the-paper-at-arms-length-er or a zoom-in-er, it might be time for an eye test.

Book yours at [specsavers.co.uk](https://www.specsavers.co.uk)

Specsavers

HONDA DETAILS RED BULL ENGINE TRANSITION PLAN

03 Red Bull and Honda have explained how they will continue to collaborate even after the Japanese manufacturer makes its official exit from F1 at the end of this season. Honda says it will continue to support Red Bull's two F1 teams through 2022, ready for the new Red Bull Powertrains division to come fully on stream in 2023.

Honda and Red Bull will also work together on motorsport activities outside F1 as well as what Red Bull describes as "marketing and branding activities". Significantly, Honda committed to maintaining its Formula Dream Project, the young driver programme of which AlphaTauri driver Yuki Tsunoda is the first to reach F1. Some Honda Racing Development UK personnel will move to Red Bull Powertrains as part of the transition arrangement.

"In F1, Red Bull Powertrains will have the right to use Honda IP [intellectual property] relating to the Power Unit from 2022," said Red Bull in a statement.

"While Honda will support Red Bull Powertrains through the assembly of power units, the provision of trackside engineering support and race operation assistance in 2022, from 2023, RBPT will take responsibility for all manufacturing and servicing of Red Bull Racing and Scuderia AlphaTauri's engines. Additionally, to ensure team continuity, there will be a transfer of Honda Racing Development UK employees to Red Bull Powertrains."

Honda is not withdrawing from motor racing entirely, but will be folding its four-wheeled racing activities into Honda Racing Corporation, the division previously solely responsible for its motorcycle racing activities. It is likely that its relationship with Red Bull outside F1 will take the form of co-branding in marketing activities, to "promote Honda's innovative mobility

products to a broader audience and help the company achieve its stated aim of carbon neutrality throughout its operations".

"Red Bull's collaboration with Honda has been enormously successful," said Red Bull team principal Christian Horner, "and while our relationship in F1 is changing, neither of us wish for that to be the end of the story."

"We are very pleased that our ambitious and exciting Red Bull Powertrains project will be strongly supported by Honda, technically and operationally, in 2022, and this will help ensure that Red Bull's transition to the status of chassis and power unit manufacturer is seamless."



"THIS WILL HELP ENSURE THAT RED BULL'S TRANSITION TO THE STATUS OF CHASSIS AND POWER UNIT MANUFACTURER IS SEAMLESS"

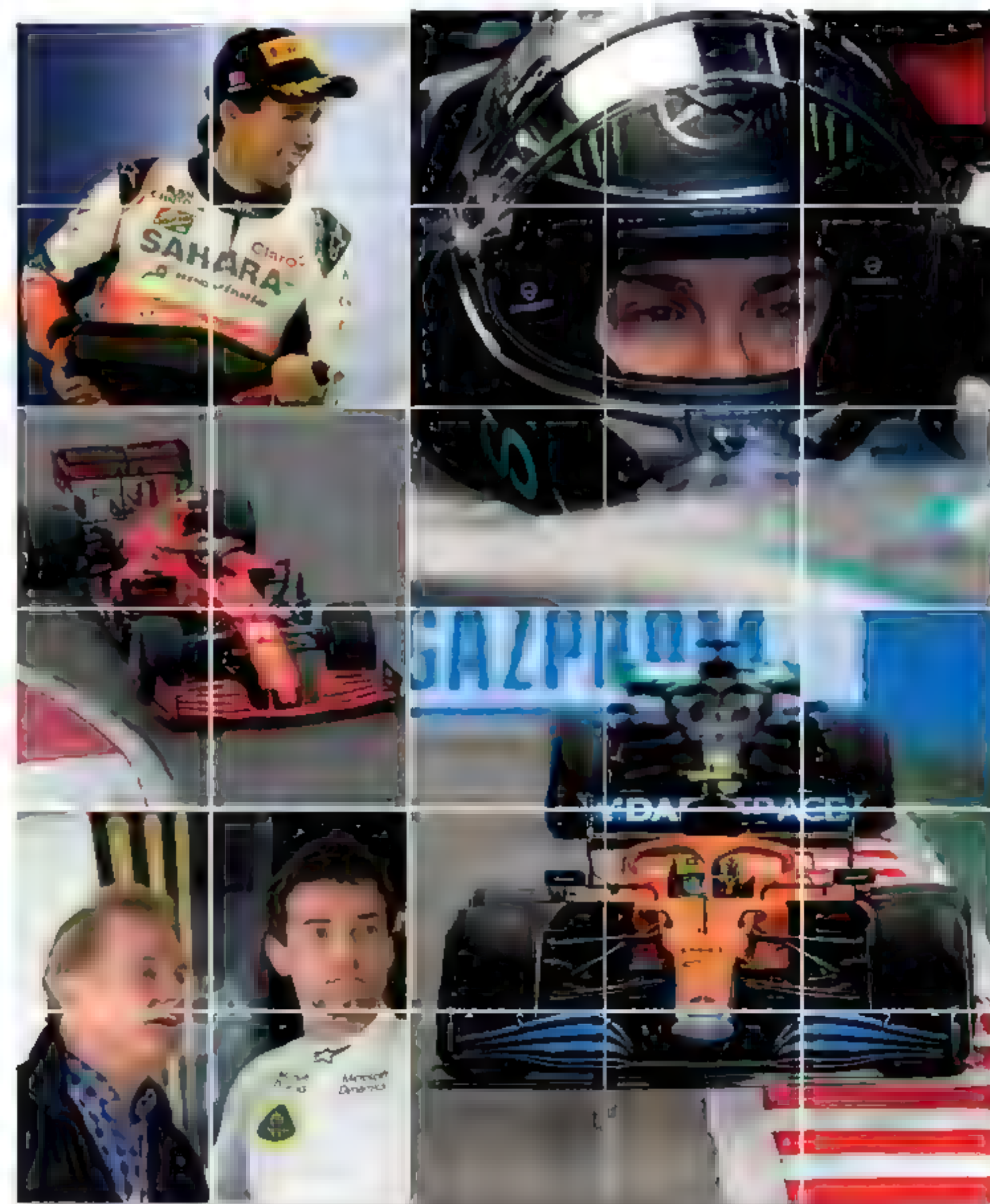
CHRISTIAN HORNER

Red Bull ran a special Honda tribute livery in Turkey, on the weekend of the cancelled Japanese GP, to say thank you to its departing engine supplier

F1 MASTERMIND

Your chosen specialised subject: the world's greatest motorsport

- Q1** How many podiums did Sergio Pérez manage when driving for Force India: 3, 4 or 5?
- Q2** Who was on pole position for the first ever Chinese GP in 2004?
- Q3** At which two races in 2020 did Haas score its only world championship points?
- Q4** How many race team-mates has Carlos Sainz had in his F1 career to date?
- Q5** Who started more world championship F1 races: Jonathan or Jolyon Palmer?
- Q6** Nico Rosberg won 23 GPs, but which is the only race he won three times?
- Q7** True or false: the 30 laps Lando Norris led during the Russian GP marked the first time the McLaren driver has led an F1 race.
- Q8** Apart from Nigel Mansell and champion Nelson Piquet, which three other drivers won races during the 1987 season?
- Q9** Lewis Hamilton claimed his 100th F1 win in Russia, but how many F1 races, up to and including Russia, had he actually led: 164, 172 or 185?
- Q10** In which year did seven of the 22 starters fail to register a single race lap in the Belgian GP?



1 5 2 Rubens Barrichello 3 Hungarian and Etel GPs 4 Six (Gasilv Hulkenberg, Kyat, Lederer, Norris, Verstappen) 5 Jonathan (82 to 35) 6 Monaco 7 False, he led a lap of the 2021 Italian GP 8 Ayrton Senna, Gerhard Berger and Alain Prost 9 172 10 1998

6,500 KMS IN 21 DAYS



FEB 28 TO MARCH 20, 2022



RALLY FROM LONDON IN THE FOOTSTEPS OF THE WORLD'S MOST ICONIC ENDURANCE EVENT

A new challenge from Bespoke Rallies evokes the glory days of the Paris Dakar rally using some of the finest roads of the classic event while avoiding the worst, making it suitable for a range of vehicles from classic and two-wheel drive hatchbacks to motorbikes



BESPOKERALLIES.COM

f t YouTube v i bespokerallies



30 DAY RALLY EVENT
OCT 18 TO NOV 18 2023



In 2023 we will celebrate the 75th anniversary of this event with a the second The Grand Prix of South America which follows the original route where possible. Where the roads are new we find the old and where they have been covered in tarmac we look for dirt.



THE F1 ANALYST

BEN EDWARDS

 @benedwardstv

PICTURES  **motorsport**
IMAGES

Tom and Nico's working relationship experienced a short interval in 2011 and 2012. Hülkenberg was displaced at Williams by the Venezuelan petro-dollars of Pastor Maldonado, so joined Force India as reserve in 2011. Nico replaced Adrian Sutil in the race team for 2012, and shone with a near miss in mixed conditions in the final race of the season in Brazil. Tom, still at Williams, was watching closely.

"I knew I would be working with Nico the following year at Sauber, so I was interested," Tom remembers. "That race was the same; it was down to Nico. The pit crew had called him in several times to go to inters, but he said no. He decided to stay on slicks and at one point that gave him almost a lap over everyone else except Jenson Button."

Sadly, it all went wrong later when a move to retake the lead from Lewis Hamilton ended in contact, a penalty and ultimately fifth place. It was the story of Hülkenberg's career: so near and yet so far. Over the next four years, the McCullough/Hülkenberg axis continued at Sauber and Force India, but opportunities continued to slip away.

"Sometimes we made strategic decisions which meant he was on target to finish on the podium," says Tom, "and then circumstances unravelled which denied him. In Monaco in 2016 Sergio Pérez

finished third, yet Sergio was nowhere near as quick all weekend."

It was a similar story when Hülkenberg left Tom's camp and joined Renault in 2017. Third place in Singapore was lost through strategy and then mechanical problems, then Nico was on target for another fine finish at Hockenheim in 2019 in the wet, but a rare mistake led him to lose control on the infamous slippery 'drag strip'.

Yet his time at Renault, especially in 2019 alongside Daniel Ricciardo, had a big effect on Nico, who briefly returned to work with Tom at Silverstone in 2020 as stand-in for Pérez, after Sergio contracted COVID-19.

The call-up was late, and an engine problem denied Nico a start in the British Grand Prix, but he then qualified a remarkable third for the 70th Anniversary race at Silverstone the following weekend.

"When Nico came back to us, he blew us away with how much more of a driver he was," says McCullough. "The reason he was better was partly down to Daniel and what he had learnt from him. It made me realise that Nico had lacked that experience and knowledge alongside him until then and he gained so much out of it. He's a way better driver because of that."

Sadly, we're unlikely to see the much-improved Nico Hülkenberg compete in F1 again. But we can still celebrate a driver who gave his all to the sport – who combined talent with intelligence and never surrendered.

TOO LATE FOR THE NEW AND IMPROVED HULK

Nico Hülkenberg recently admitted his Formula 1 days are over and that was a sad moment for me. Having commentated on him for 15 years, I remain baffled that an F1 podium escaped his skills.

The first time I observed Nico was at Zandvoort in 2006. The second season of A1GP began with Hülkenberg driving for Team Germany. He had won the 2005 Formula BMW championship in his home country before stepping up to the 550bhp Zytek-powered Lola single-seater without a blink.

When a thunderstorm hit the track, we discovered just how talented he was. Cars driven by experienced campaigners were half spinning or scrabbling through gravel traps, but Hülkenberg kept it all together in the rain and delivered a brilliant final stint on slicks to overcome local hero Jeroen Bleekemolen and claim victory.

Nico delivered eight more wins to earn the title for Germany, including a dominant victory by almost 43 seconds in the wet in Malaysia, to reinforce his remarkable talent. Hülkenberg went on to win the F3 Euro Series and GP2, was adopted

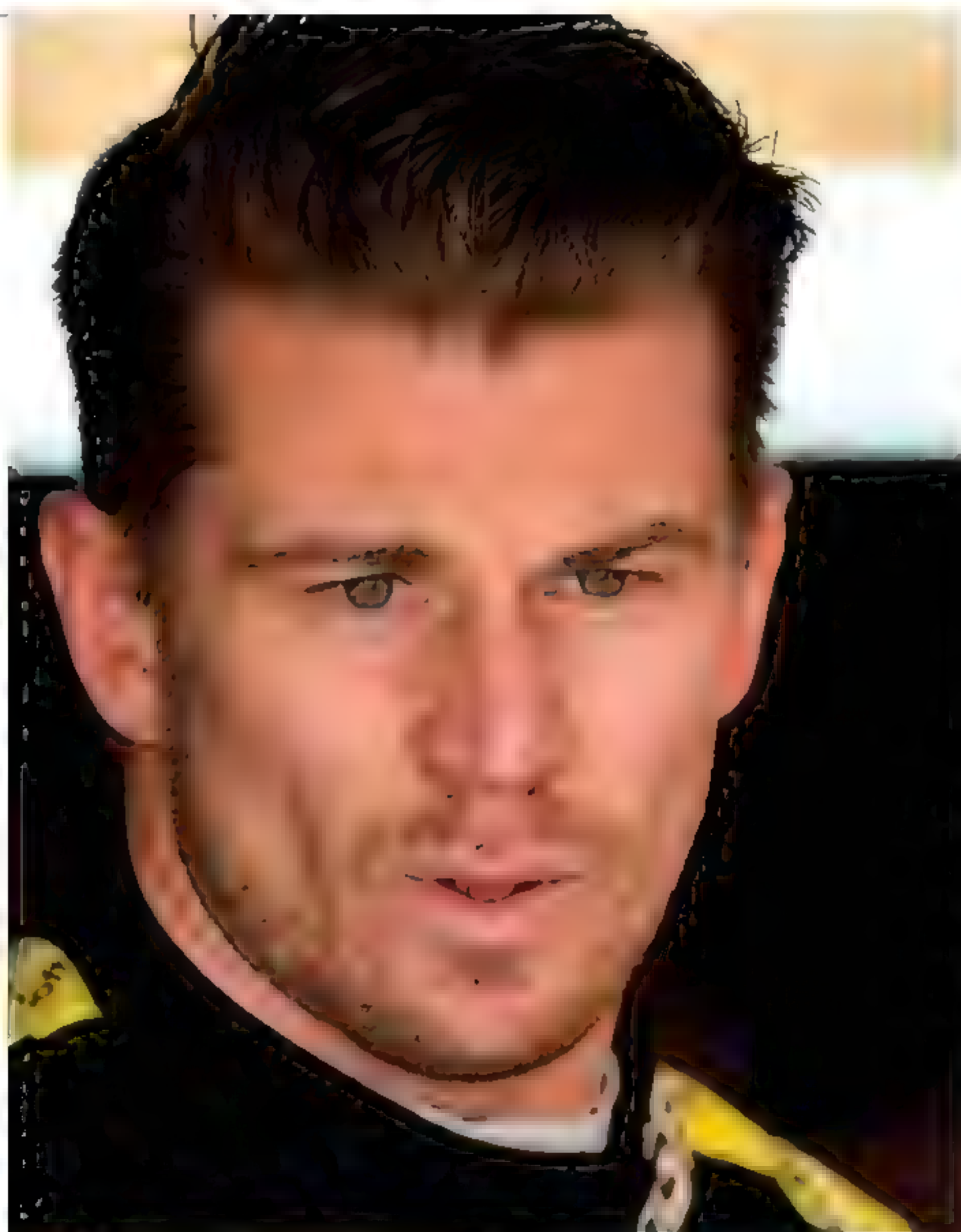
by the Williams young driver programme and worked with junior race engineer Tom McCullough, now performance director at Aston Martin where Nico is currently reserve driver.

In 2010 they were both promoted. Nico joined Rubens Barrichello at Williams and Tom became Hulk's F1 race engineer. Nico was confident but soon realised that Barrichello's ability and experience in F1 was not easy to overcome. But it all came together in Brazil when Hülkenberg took his one and only pole position in tricky conditions.

"Everybody went out in Q3 on intermediates," recalls Tom. "The only thing I decided to do was to send him out first to get as many laps in as possible. A lot of people were half a lap out and in each other's way." So was it Nico or Tom who chose slicks in the latter stages? "Neither...it was Rubens! I said to Nico 'You are P6 and Rubens thinks dries are the thing' and he replied 'OK let's give it a go'."

The result was pole by over a second from the Red Bulls of Sebastian Vettel and Mark Webber, and in Tom's opinion Nico's performance that day summed him up: "He drove it like he stole it. That lap typifies him as a driver; phenomenal car control and natural talent to be able to drive right to the peak of the tyre slip angles. He's just naturally fast."

A view backed up by Hülkenberg's subsequent team-mate at Renault, Jolyon Palmer: "He has a very natural feel for grip and taking the car to the limit, rarely going over the top or making mistakes. He had the skills for a top team if he had been given a chance, but obviously it sort of passed him by."



Hülkenberg made his F1 debut with Williams in 2010 (right) but, according to Tom McCullough, it was during his time at Renault from 2017-19 (left) that he improved most as a driver



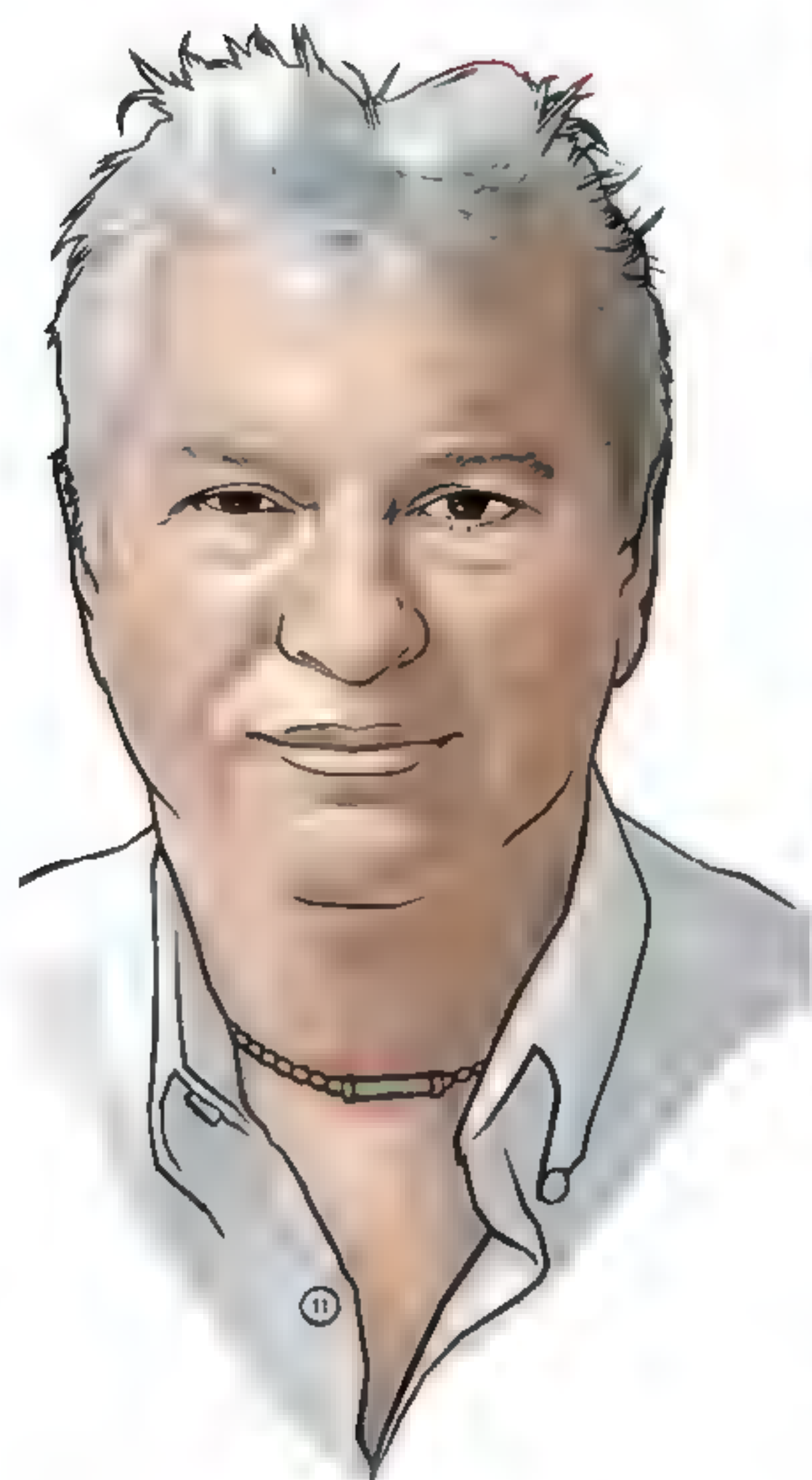
Hülkenberg celebrates claiming pole for the 2010 Brazilian GP with Rubens Barrichello and the rest of the Williams team



Nico first came to prominence in A1GP as part of Team Germany in 2006-07



The highlight of Hülkenberg's brief return to F1 as a race driver in 2020 was qualifying a superb third in the 70th Anniversary GP



UNDER THE HOOD

PAT SYMONDS

PICTURES  **motorsport**
IMAGES

car model will be used, generally with a known set-up that might have been used at another circuit with similar corner speeds and lengths of straights. This will provide a good starting point for the iterations that are needed to get close to an ideal set-up. The car model itself will be extremely sophisticated. Such is the computing power available these days, that is no problem. The first lap time simulation I used was in 1986 and, although it only optimised about five different aero levels and the gear ratios, it took all night to run. Today the simulation will analyse a lap in much less time than it takes to drive it.

This first simulation sweep will still concentrate on wing levels to get the right compromise between downforce and drag, but will

now be able to adjust all the other settings on the car – such as rideheights and spring stiffnesses – to obtain an optimum. Unlike our early simulations, which always drove the car over a racing line that the engineer would determine by eye, these days the minimum lap time algorithms will seek the ideal racing line for each different set-up to ensure maximum performance.

Of course a good car model and an ‘artificial intelligence’ driver are of no use if we can’t accurately describe the track itself, and in these early runs we may not have particularly sophisticated track information. For a new circuit, the first information the teams will get is a 2D architectural map which they then have to digitise, converting the track limits to X-Y coordinates over the entire area. This early map may or may not have elevation information as well – often this comes in a later version. As the map will generally be based on what the architect intends for the circuit, long before it is actually built, it certainly won’t have all the details of the kerbs so the simulation will generally assume the car stays entirely within track limits.

The first stage of the investigation will generally look at a multi-factor optimisation. For this, the engineer will set certain bounds of a number of parameters that can be altered. For example, they may set the front rideheight to be investigated between 15mm and 20mm, the front roll stiffness between 1 and 1.2 Newton meters per radian, and the downforce to be in the entire range the wings designed for the car can obtain. ►

SIMULATION, SIMULATION, SIMULATION...

The 2020 and 2021 seasons will be remembered for many things, including the significant disruption caused by a calendar that often shifted in response to an ever-changing pandemic. While nothing good came out of the global crisis, F1 fans were at least able to enjoy their sport and see some variety compared with the formulaic calendars of the previous few years.

Imola and Istanbul were reintroduced in 2020, while F1 raced at Mugello and Portimão for the first time. This season, Jeddah in Saudi Arabia and Losail in Qatar have been added, as well as returning again to Imola, Zandvoort, Istanbul and Portimão to help achieve a 22-race championship.

One might argue that Imola and Istanbul are not new to F1, and cars have tested at Mugello and Portimão in recent years, but while historic data provides an indication of what may be expected of a track, cars and the tyres have changed so much in the intervening period that much of the data is comparative and anecdotal, not quantitative.

So how do teams prepare for a new circuits?



The Jeddah street circuit is one of two brand new tracks added to the calendar this season

The answer, of course, lies in simulation – but the initial work will not be done on a simulator, it will be done on a computer with a ‘virtual’ driver so that set-ups and driving lines can be optimised without the initial distraction of subjectivity.

In order to start this simulation, the standard

THAT FANTASTIC FEELING



- OUR “PARADISE” surroundings have recently become a UNESCO geopark!
- Watch the onboard video on our web site, turn on the music . . . get the vibe!

+ TOP QUALITY EXCLUSIVE TESTING + SPECIAL VIP EVENTS
+ 24 HOUR TESTS + CONFIDENTIAL TESTING FILMING
+ OUR FAMOUS SAFARI TOURS! **PLUS OUR TOTAL PASSION.**



www.guadixcircuit.com

GRANADA / SPAIN.

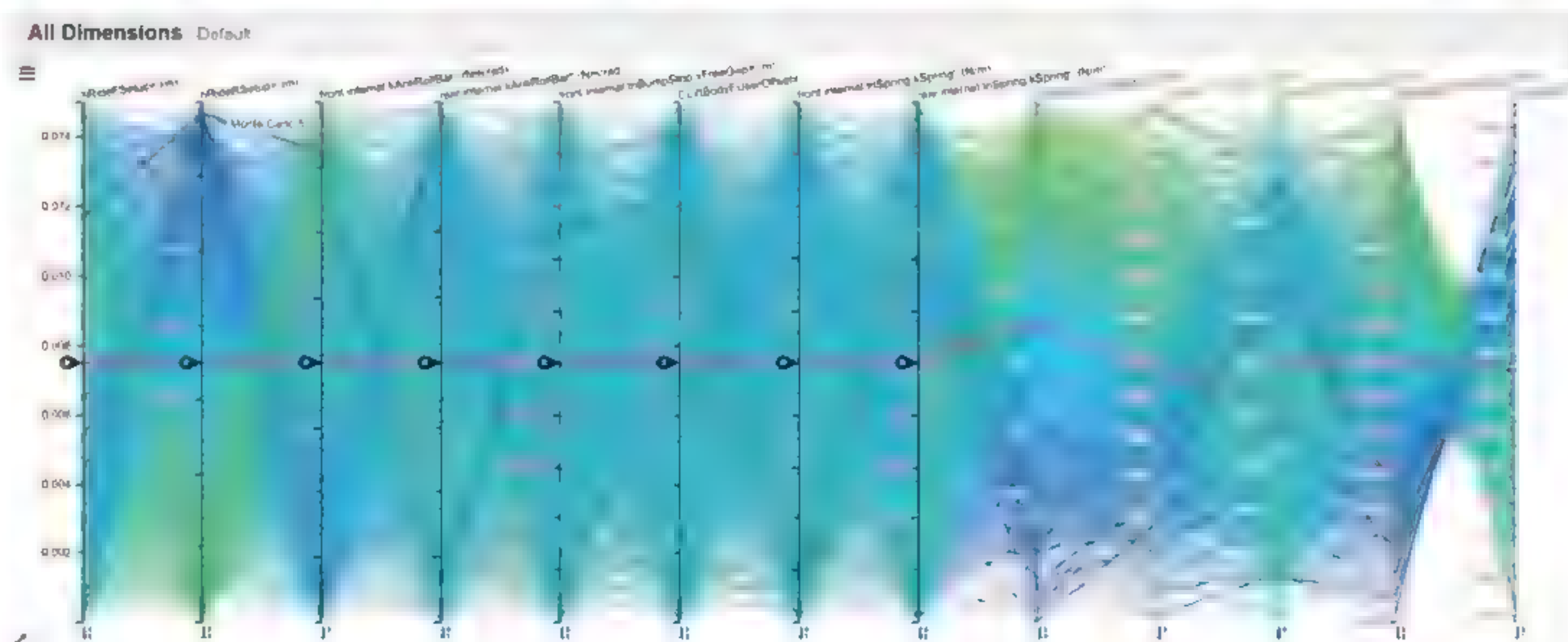


Qatar's Losail circuit (above) is an established track, but F1 cars have never run there, so simulation data (below) will be invaluable for teams

It would not be unusual to allow nine or 10 set-up parameters to be investigated this way. The simulation then automatically runs many combinations of the variables and presents the results in a specific type of diagram, where each of the input parameters is displayed in multiple axes alongside the output parameters such as lap time, maximum speed and end of straight rideheights. At first sight this might look like a spider's web, but a little inspection shows the trade-offs between lap time and end of straight speed, to name but two.

From this, a basic set-up is adopted and it's time to move to the full simulator. This is sometimes known as the 'driver-in-the-loop' simulator, as the inputs and line seeking algorithms of the first simulations are replaced by a driver using visual and vestibular feedback to drive the car. At this stage a lot more detail is needed, and lidar scans of the circuit are used to give photo-realistic scenery and track markings. This adds a lot to the computing power needed, as does simulating the engine and transmission dynamic responses – which will be done by a control unit identical to that used in the real car.

The driver now works with the engineer



THE ENGINEERING TEAM WILL ALSO EXAMINE FACTORS SUCH AS STABILITY, TYRE ENERGIES AND EVEN, IF THE SCENERY DETAIL IS GOOD ENOUGH, PRACTICE THE PIT ENTRY FOR FASTER PITSTOPS

to hone the set-up to his or her liking. Lap time is the ultimate goal, but using the same data analysis tools as they would use trackside, the engineering team will also examine factors such as stability, tyre energies and even, if the scenery detail is good enough, practice the pit entry for faster pitstops.

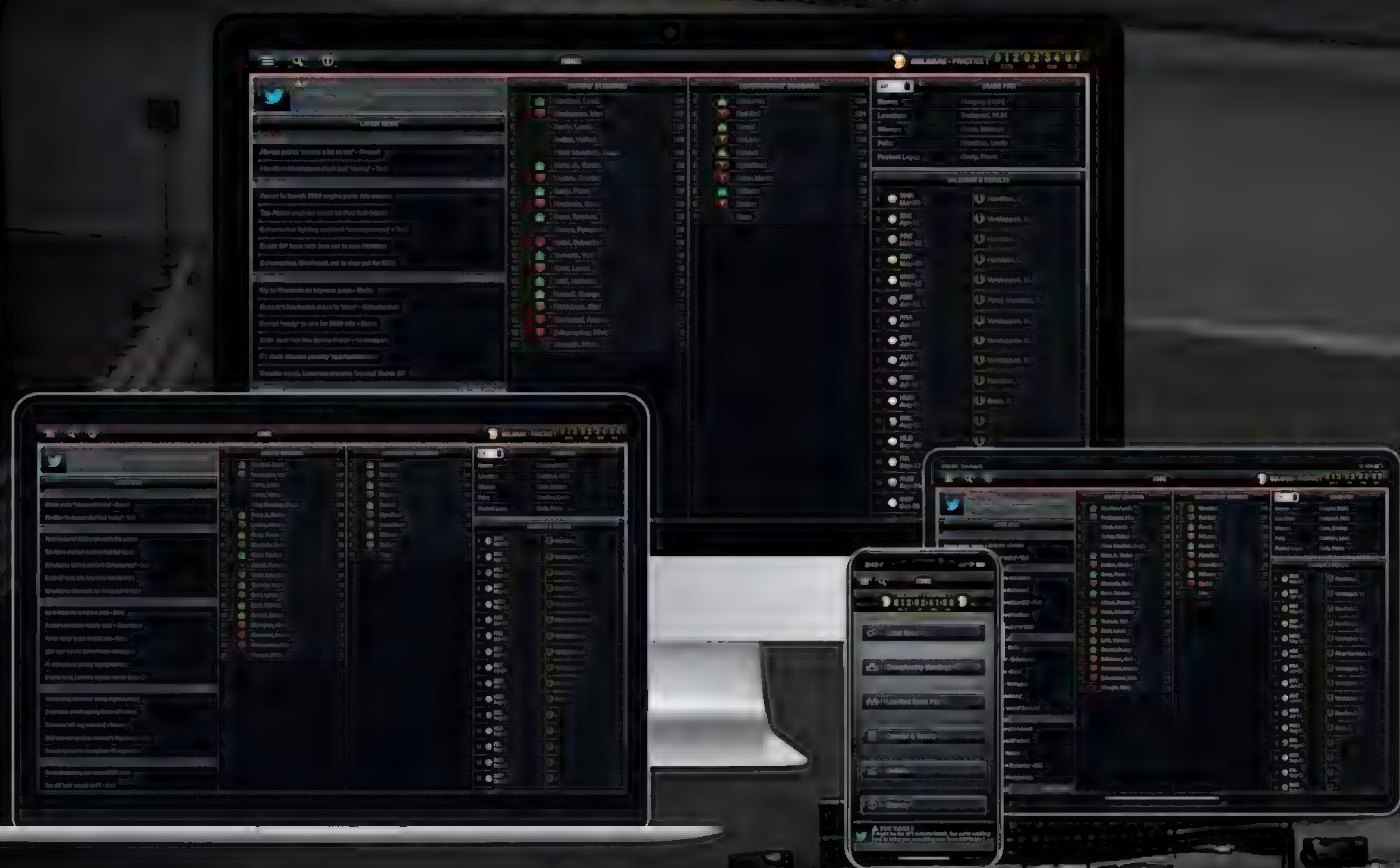
Simulation is a double-edged sword. Teams love it as they strive for perfection in a controlled environment, but that reduces jeopardy, which in turn reduces the appeal for spectators. However, the genie is out of the bottle. Simulations will only become more sophisticated in the years to come.

GRAND PRIX GUIDE



THE MOST INNOVATIVE AND COMPREHENSIVE PLATFORM FOR FORMULA 1 DATA & STATISTICS

DESIGNED FOR **iOS** AND **ANDROID** MOBILE & TABLET PLATFORMS
AND NOW, FOR **MacOS** AS WELL !!



NEWS : LATEST GLOBAL FORMULA 1 NEWS
SEASON SUMMARY : EVERY SEASON SINCE 1950
WORLD CHAMPIONSHIPS : EVERY ONE SINCE 1950
DRIVERS : 980+ DETAILED PROFILES
CONSTRUCTORS : 200+ DETAILED PROFILES
GRAND PRIX : 990+ DETAILED RESULTS
CIRCUITS : 70+ DETAILED PROFILES
ENGINES : 100+ MANUFACTURER PROFILES
TYRES : 10+ MANUFACTURER PROFILES
STATISTICS : 150+ AUTO UPDATED TABLES

MOBILE.GPGUIDE.COM

GPGUIDE IS AN EXCLUSIVE PRODUCT OF RKADIA PARTNERS, LTD.
COPYRIGHT © 2021 ALL RIGHTS RESERVED
FORMULA ONE LICENSING BV OWNS THE FORMULA ONE TRADEMARKS

AVAILABLE IN 6 LANGUAGES



Download on the
Mac App Store

Download on the
App Store

GET IT ON
Google Play



motorsport
JOBS

RECRUITMENT
DRIVEN BY
PASSION



Find your dream job

Here at Autosport we've been helping people find great jobs in motorsport for over 60 years. Today we're launching a new global motorsport jobs site, where you can:

- Find the latest jobs in motorsport
- Apply for a job with just one click
- Upload your CV and let recruiters find you
- Set up job alerts - don't miss out on your dream move

Register at motorsportjobs.com today



motorsport
NETWORK

Motorsport Jobs
- A Motorsport
Network Company



STRAIGHT TALK

MARK GALLAGHER
 @_markgallagher

On the technical front, talented team stalwart Andrew Green has been elevated to the role of Chief Technical Officer, supported by three reports in the form of Performance Director Tom McCullough, Engineering Director Luca Furbatto and Technical Director Dan Fallows. While McCullough has been with the team since 2014, Furbatto left his role as Chief Designer at Alfa while Fallows resigned from his position as Chief Engineer – Aerodynamics at Red Bull.

These are the men facing the not inconsiderable task of hauling Aston Martin into contention for the world championship title upon which Stroll has set his heart.

It's a goal which has helped lure Whitmarsh back into a frontline role in F1 as Group CEO of Aston Martin Performance Technologies. Stroll has big plans, as he turns 'Team Silverstone' from much-loved corner shop into a giant superstore.

Not satisfied with turning Aston into a Red Bull, Mercedes and Ferrari-beater, the aim is for the group Whitmarsh leads to become a '£1billion business' within the next four or five years.

As tall orders go, that's high, but Whitmarsh was a key lieutenant

in Ron Dennis's drive to turn McLaren from a Formula 1 team into a diversified technologies business with the creation of McLaren Automotive and McLaren Applied Technologies. Whitmarsh knows it can be done, or at least something quite similar. He will also be aware of the pitfalls.

While Toto Wolff pushes to make Mercedes' Applied Science business a successful venture – thanks in no small part to shareholder Sir Jim Ratcliffe's quest for Americas Cup glory – and Christian Horner is rightly proud of Red Bull Advanced Technologies' development of the Aston Martin Valkyrie hypercar, there are rather more salutary tales to be told of such ventures at McLaren and Williams.

McLaren's Applied division is no more. It was sold off to Greybull Capital back in August as McLaren renewed focus on Racing and Automotive. A division which Dennis once viewed as a much-loved prodigy later turned into a troublesome child. Once the McLaren Group's new Executive Chairman Paul Walsh arrived in March 2020 – not a great month for business – Applied's days were numbered.

Williams Advanced Engineering sold out to EMK Capital in 2019, so two of Britain's most iconic F1 teams found that while technology and innovation sells, scaling it beyond prototype engineering is not easy.

It will be fascinating to see how Whitmarsh uses those past experiences to help Stroll achieve his future goals.

STROLL BRINGS ANOTHER HEAVY HITTER TO ASTON

The return of Martin Whitmarsh to Formula 1 is the latest move by Lawrence Stroll to give his investment in Aston Martin – both the car company and the racing team – every chance of success.

Stroll likes heavy hitters with a proven track record. Witness his appointment of former Mercedes-AMG boss Tobias Moers, tasked with reversing Aston Martin's sales and fortunes on the stock market, and one-time Inter Milan CEO Jefferson Slack as the F1 team's Managing Director – Commercial and Marketing.

Slack later brought in McLaren's Rob Bloom as Chief Marketing Officer, bolstering a commercial operation that achieved notable successes on the sponsorship front during the early part of this year.

Sadly, the on-track results haven't followed suit, the impact of those tweaked technical regulations stifling the performance of the team's 2020 race winner. Little wonder team boss Otmar Szafnauer was an unhappy man back in the spring. I wouldn't have wanted to explain this to Lawrence either...



Whitmarsh was at McLaren for 24 years but has been out of F1 since 2014. The ambitious Aston Martin project is hoping his McLaren experiences will aid the team in its quest for success

THIS MONTH

Laurent Rossi

Chief Executive
Officer, Alpine

While many of his peers moved on to Renault's Formula 1 engine project, Laurent Rossi stepped out of powertrain development and into the business world – a journey that would ultimately bring him back to the world of cars and motor racing, via a stint with the world's most powerful and influential tech company...

CV

2021

Chief Executive
Officer, Alpine

2018-2021

Chief Strategy Officer/
SVP Corporate Strategy,
Partnerships and Business
Development,
Groupe Renault

2012-2018

Industry Manager/Global
Automotive Vertical
Lead, Google

2009-2012

Project Leader, Boston
Consulting Group

2007-2009

MBA, Harvard
Business School

2000-2007

Project Leader, powertrain
division, Groupe Renault

1999-2000

Masters in Mechanical
Combustion Engineering,
École Nationale Supérieure
du Pétrole et des Moteurs

1996-1999

Masters in Mechanical and
Fluid Engineering,
INT-ENSEEIH

GP Racing: Having qualified as an engineer, what made you decide to go to business school?

Laurent Rossi: After six or seven years of working on powertrains and doing pretty much everything there – I travelled to Mexico, tested engines in volcanoes, went to the Arctic Circle, I did a lot of cool stuff – I just realised I was only doing engineering things. I was pretty much like a big boy playing with big toys. But I was missing the business side of things. I was wondering why we weren't selling certain cars or engines in some countries, and people were like, 'This is stuff for people who know things, you go back and play with your pistons and whatnot, and let the grown-ups work on strategy.' I thought, 'OK, I'll show you.' So I got an MBA to add business skills to my portfolio of competence.

GPR: Eventually you came back to Renault but you did some consultancy and worked for Google in between. Did that experience outside the automotive industry give you a broader perspective?

LR: I discovered so many new fields when I studied for my MBA, I wanted to carry on expanding my horizons. I didn't want to stop after the MBA. So I went into consulting because it was the best way for me to navigate several industries – roaming through an entire value chain across all the dimensions of the business world, if you will. And it was very helpful in understanding marketing, manufacturing and sales. The supply chain in pharma is fantastically complicated but at the same time a really well-oiled machine. I was learning from the best.

I did finance, pharma and aeronautics but, very often, I was pulled back into automotive industry assignments because I was an automotive engineering specialist. And then I moved to Google where I carried on learning because it was the digital New World, a very customer-centric way of working. It's definitely different from old industry. But the common thread was automotive – I never really went far from that industry. I realised that I loved the automotive

INTERVIEW STUART COOLING

industry too much, and there was a big change ongoing, and it was high time for me to go back to be part of that change – apply the knowledge I'd accumulated and give back to my home industry.

GPR: Tech companies, even the big ones such as Google, like to think they're agile even when they've grown into big corporations. How influential was this thinking?

LR: The big lesson I got from Google, one I didn't think would be easy to apply in the automotive industry but you can, was to fail fast. Learn quickly – it's okay to make mistakes as long as you learn from it and move on. Whereas in automotive there's a long maturing process, you make the product as flawless as possible, but that means sometimes you aim for less than you could or should have. Once you launch a car, you don't want to recall it – that's usually painful and costly.

But even in the process of making a car, we can have multiple iterative loops as long as we know what value you want to convey to your customer. People now expect things to be like their phone – evolving and improving quickly, to give them what they want when they want it. They don't like cars that aren't up to date.

GPR: Is that something Formula 1 can help with, since there's so much driver-in-loop simulation? Is there a possibility of, say, evaluating the interior design as well as the driving experience in a simulator?

LR: That is a great question. F1 has so many tools enabling you to learn and imagine the behaviour of the car before you even build it. We're going to use that in the road car business. And we're going to bring some elements of the road car side into F1, because it has much larger infrastructures and resources, we have a lot of AI expertise on the manufacturing side of things. We're going to take a page or two from this book into F1. There will be a cross-pollination of resources and knowledge that could prove useful in the future.



McLAREN'S NEXT-LEVEL GAMING STUDIO

One of the first Formula 1 teams to enter the gaming space, McLaren is taking its commitment to Esports to another level by building a high-tech Esports facility in its Woking HQ

WORDS STUART CODLING
PICTURES McLAREN

Gaming might still cause some motorsport purists' noses to wrinkle – but, while the racing itself isn't 'real' as such, its value to the business of motorsport is clear and obvious. It brings tech sponsors who want to be more than just stickers on a car and, perhaps even more importantly, it provides an alternative entry point for new fans... and, sometimes, new competitors.

McLaren was among the first Formula 1 competitors to hit the Esports scene with a purpose, partnering with the World's Fastest Gamer programme in 2017. Eventual winner Rudy van Buren went on to compete in the real world at the annual Race of Champions with Lando Norris, and spent a year as McLaren's official simulator driver. McLaren then formed its own Esports programme, the McLaren Shadow Project, a competition which offered prizes ranging from racing kit and factory tours to a seat in McLaren's own F1 Esports team.

McLaren Shadow is now one of the distinct

business units in the new corporate structure at Woking, with a mandate to "stand on its own two feet" in the words of McLaren CEO Zak Brown: a self-sufficient business which acts as a complement to, without distracting focus from, the F1 team. The Shadow Studio is a new facility within the McLaren Technology Centre which will provide a focal point and a development hub for competitors as well as an aspirational destination for fans. Calling it a games room undersells its significance to the business.

"It's a really important pillar for us," says Lindsey Eckhouse, McLaren's head of licensing, commerce and Esports. "We look at Esports as two separate things. The first is an accessible way for people to get into racing. Not a lot of people can afford to get to tracks or have the means to get started in real-life racing, because it's expensive even to do karting.

"This allows people to test their abilities, and also be part of the space in a more accessible way. So that's a big piece of it. And then the second piece is really the next generation of fan growth. We embraced Esports early on within the F1 world, and we've seen strong growth with new fans, younger fans who are starting to come into the fold and get a taste of what F1 has to offer. It's a really interesting way for us to deliver a new audience to the business."

Accessibility is a fundamental element of Esports' appeal and it's why so many teams – and F1's commercial rights holder – have been so keen to get involved. Even grassroots motor racing is expensive; a competitive Formula Ford programme now costs in excess of £100,000. Now, while hardcore gamers might be using hardware which costs in the thousands, the entry point is games consoles which cost in the hundreds. Rudy van Buren is one of a handful of gamers who made the transition to professional racer (he's currently competing in the German Porsche Carrera Cup) and his story is a relatively typical one: he'd tried karting, been good at it, but then shelved his ambitions when the costs stretched beyond his means. Without gaming he would have been lost to motor racing.

Gaming also provides McLaren with a broader commercial offering. The Shadow Studio functions as a showcase for the products and services of a number of team partners who might otherwise be present only as branding. Alienware, Dell's gaming brand, provides the Aurora R10 PCs and gaming monitors on which the software





runs. Logitech G furnishes all the driver inputs – steering wheels, pedals and so on – as well as headsets and webcams.

“We have several examples of partners where we’re genuinely using their technology to help our professional sim racers become better drivers,” says Eckhouse. “And similarly, help amateur racers or gamers out there get closer to the sport. So Splunk are creating a real-time visualisation dashboard with us for our pro McLaren Shadow drivers so they can perform better and understand, in real time, what they need to adjust to be able to get around a circuit faster.

“And then on the other side of it, together with Logitech G, we’ve created an amateur-focused

ESPORTS IS AN ACCESSIBLE WAY FOR PEOPLE TO GET INTO RACING. NOT A LOT OF PEOPLE CAN AFFORD TO GET TO TRACKS OR HAVE THE MEANS TO GET STARTED IN REAL-LIFE RACING, BECAUSE IT’S EXPENSIVE EVEN TO DO KARTING

LINDSEY ECKHOUSE

platform [the Logitech McLaren G Challenge] which essentially allows people from all over the place, who may be massively into it or not at all, really just to start to touch and feel and test the waters. And in doing so they’re able to win amazing prizes and get closer to the McLaren F1 team. So it’s a great tool to bring new people in.”

McLaren also benefits from the status of one of its F1 drivers as an Esports pioneer. Lando Norris almost single-handedly

galvanised the rest of the grid into getting involved in gaming during the coronavirus hiatus last year, opening the world of online game streaming to a vast new audience.

“Lando is hugely valuable for us in terms of his passion for the space and his willingness to try new things and engage with us there,” says Eckhouse. “The Esports audience is demanding. If somebody just shows up inauthentically just to tick a box, or just to pretend that they like it, the community calls that out.

“And so Lando’s genuine love for and engagement with gaming, with Twitch and with Esports really helps us continue to build momentum. He’s a wonderful asset and champion for everything we’re trying to do.”





UNBREAKABLE BULL BOND

As Red Bull and Honda go all-out for victory in the final season of the Japanese engine manufacturer's latest dalliance with Formula 1, **Max Verstappen** finds himself thrust into a compelling and controversial title fight with Lewis Hamilton. As Max focuses on his ultimate goal, being at Red Bull increasingly seems the perfect fit for a driver who is in no mood to compromise

WORDS OLEG KARPOV
PICTURES  AND RED BULL

Even after six and a half years in F1, it was something Max Verstappen had never experienced. Out of the British Grand Prix after a first-lap, 51G crash, he wasn't even able to watch the remainder of the race, won by his title rival, a 32-point lead shrunk to just eight.

"I was flown to the hospital and then basically when I got to the hospital I had to go straight in," Verstappen recalls – in an interview with *GP Racing* – of his trip to a Coventry hospital on the day of the British Grand Prix. "Then you get to like the trauma division... I have never really been a big fan of going to hospitals, because you see

people who are hurt. So it wasn't a really nice environment, of course, but I had to be there. You get check-ups, but there were a lot of people who need check-ups and scans and stuff. So you're waiting as well a lot. So yeah, it was a very long day... evening, before I was out of the hospital."

If there was anything that could've cheered him up that evening, it was the team's reaction to what happened. Red Bull team principal Christian Horner was flat-out when talking to TV crews, accusing Lewis Hamilton of "dirty driving", while Horner's Austrian colleague, Red Bull motorsport ►

advisor Helmut Marko, demanded the Mercedes driver be disqualified.

"Everyone is allowed to share their opinion about how they think the situation is," smiles Max, talking of his bosses' reaction. "We have a very close relationship all together. We are a team. And we fight as a team. We do everything together."

They went further still. The week after the race, Alex Albon was gathering data at Copse at the wheel of a 2019-spec RB15 for an appeal to the FIA, and though in the end those findings did no more to convince the stewards to change course than Ferrari submitting Karun Chandhok's analysis back in 2019 after Sebastian Vettel was penalised in the Canadian GP, Red Bull hadn't done the filming day just to give everyone a laugh.

If Max ever needed more proof that his team will always fight his corner, he has it now. Call them musketeers or a posse, but 'one for all and all for one' is definitely the best way to describe Red Bull's approach in the last few years. Whatever happens, be it a pitstop mistake or a crash on a reconnaissance lap on a damp track – as Max points out, there is almost no need to waste time apologising, and no room for accusations.

"Like I said, we win and we lose together," says Max, when asked if he felt after last year in Hungary, where crashed en route to the grid, that he owed his crew a round of drinks. "And at the end of the day, we actually had still a good result."

"You know, I always try to do the best I can to get a good result. And the mechanics always try to do the best they can to get the car ready or

repaired, all this kind of stuff. You need to fight for each other. And that's what we definitely do.

"They also know I always give 100%. That's why we have such a strong and good relationship."

Having each other's back, after all, is also the only option. Red Bull wouldn't be fighting for the title this year without Max Verstappen. And it's probably true the other way around too, given the lack of alternative competitive seats in F1.

But Verstappen is not only the best chance for the team to win the championship again. He's also custom-made for Red Bull. Young, cocky and straightforward, he fits perfectly the environment created by Horner and Marko.

"I mean, for me, that really works very well," Max says of the relationships within the team.

Verstappen's honest working relationship with his Red Bull race engineer Gianpiero Lambiase (above, left) is a key part of Max's success

"Because I think it's very important to be able to say to each other when things are done correctly or wrong. Because that's how you solve things very quick. If you keep on going around the problem and not being straight to the point, I don't think that's a good thing for the team in general. So, yeah, it works really well, to be honest."

For sure it wouldn't work well if Max himself wasn't prepared to be on the receiving end of blunt messages. Not only from Marko or Horner, but also from his race engineer Gianpiero Lambiase, whose calm and almost indifferent "understood, Max" replies over team radio seemingly always discourage Verstappen from engaging in any

kind of heated debate.

"I have a lot of respect of sometimes how calm he stays," says Max of Lambiase, who's best known in the paddock as 'GP'. "When you are in the car your heart rate goes up, you're under pressure. Sometimes you have your moments where you speak up or raise your voice, but then if you also have from the other side someone raising their voice, you can end up in a massive argument on the radio while driving, which I don't think is good."

"We always talk about things. Also, when we have disagreements or whatever, we very easily get over it again, because at the end of the day, we have the same goal – we both want to win every single





"I KNOW FOR MYSELF THAT FROM 2018 ONWARDS I ALSO AS A DRIVER MADE STEPS JUST PURELY FROM EXPERIENCE – KNOWING WHAT YOU WANT FROM THE CAR, BUT ALSO THE WORKING RELATIONSHIP BETWEEN MY ENGINEERS TOWARDS ME"

understands what I need from the car, and also how I can feed back things to him.

"Of course, we have moments where we don't agree. But I think that's also wanted, because at the end of the day you want to make each other better, and you want to make the car faster. It's good to be able to have discussions and come [up] with the best solution for it. We [are] also very honest to each other, like I am to Helmut and Christian. And I think that makes it so good."

When a driver and a team win their first race together, there's arguably not too much room for improvement – but Max is ready to admit that in 2016 he probably wasn't as prepared for a title fight as he is now.

"You still learn," he says, honestly. "I mean, maybe the speed was there straight away, but it's like, the little details and understanding of tyres, how you set up a car, [how to adapt to] changing conditions throughout the whole weekend, how you build up a weekend. All these kinds of things, you know, they influence the performance as well."

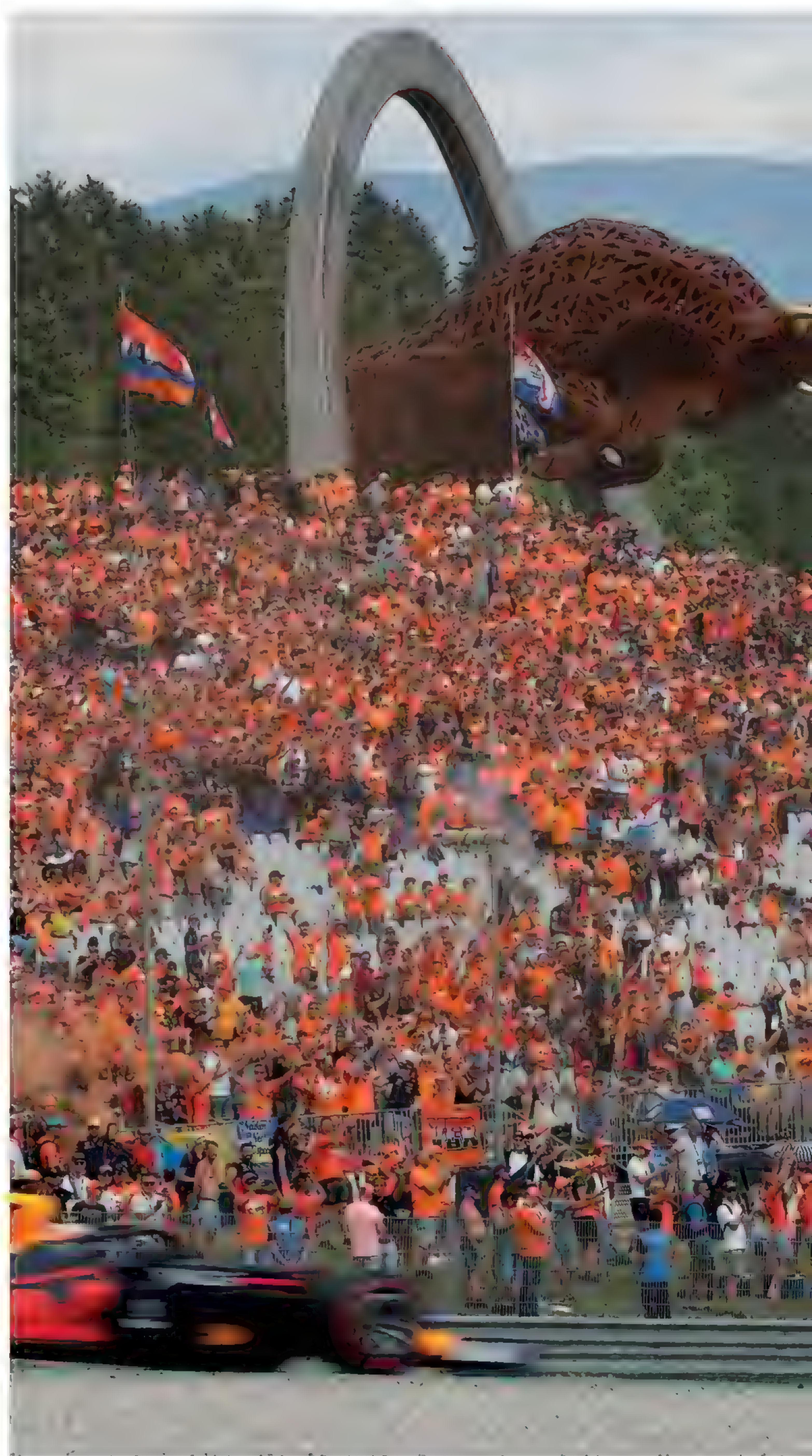
"I know for myself that from 2018 onwards I also as a driver made steps just purely from experience – knowing what you want from the car, but also the working relationship between my engineers towards me. We really understand each other very well in what we need from a car. ▶

Lambiasi is able to stay calm when Max, racing often in front of his adoring fans, can sometimes get a little emotional inside the car

weekend, we want to try and have the best possible result. Yeah, sometimes, of course, that can get a bit emotional, but I think that is a part of racing."

Lambiasi joined Red Bull ahead of the 2015 season, having switched from Force India, where he'd most recently worked with Sergio Pérez. 'GP' was supposed to replace Guillaume Rocquelin as Sebastian Vettel's race engineer, but the German left for Ferrari, and so for the first year and a half of his time at Red Bull, Lambiasi worked with Daniil Kvyat – right up to the point when, from the Spanish GP onwards in 2016, the Russian was swapped out for Max.

"GP and I now have been working together for a few years," Max says. "We have a very good and honest relationship, I think. He really



IN THE LAST COUPLE OF YEARS, THERE WAS ONLY ONE THING MISSING – A COMPETITIVE CAR. AND MAX FINALLY GOT IT THIS SEASON



And that naturally then also gives you more lap time.

"The key is that you should be able to adapt to what the car needs," Max continues, warming to his theme. "So, if the car is understeering, you cannot fix it, then you have to adjust your driving to it. If the car is always oversteery, I have to adapt, because if I just keep saying 'no, but this is what I do', but the car doesn't like that, then you will not perform, right?"

"So, I think what is important is that you should be able to adapt to every single situation. I try to always adapt, like every single weekend. I mean, the car never feels the same, right? Every track it's different. So, you have to adapt."

From 2019, Max became the undisputed number one at Red Bull, whose ultra-prestigious junior programme is yet to find, post-Daniel Ricciardo, a driver who can even get close to Max. Pierre Gasly and then Albon both lost their drives after being completely outperformed by Verstappen. Even the experienced Pérez is struggling to be as competitive against the Dutchman as Ricciardo was.

But has the Australian's departure changed anything? Does Max feel his ties with Red Bull have become closer since, given he's now clearly the main man in the garage? Verstappen himself isn't convinced that's the case, and hints it wouldn't be that easy for Ricciardo to still be matching his current level had Daniel opted to stay.

"I think I also got better

eventually, because I have more and more experience," Verstappen explains. "So, I find it also difficult to really compare fairly, you know. I find it a bit unfair to say that he was maybe more close, and I think there are a lot of things to it.

"For sure, at the time, Daniel is, you know... he's still quite a bit older and more experienced, but I think I gained a lot of experience in the last few years, while in the beginning of course I was still quite new and I didn't really have a lot of car racing experience, because I had one year in F3, basically one year in Toro Rosso and then moved to Red Bull. And I definitely think there the big jump started to happen, which I think is a natural process in the first five years of your F1 career."

In the last couple of years, there was only one thing missing – a competitive car. And Max finally got it this season. Now it's time to prove he's able not only to win races, but to be a genuine title contender until the end of the season.

"It's a different mindset as well," says Max of what's changed since the beginning of the year. "Sometimes you were just going for like an individual race weekend where you knew that you had a chance of winning, whereas now that opportunity is more or less there every single weekend. So your approach to the race is, of course, a little bit different.

"You learn from your mistakes you've made, and for sure, in a season like this that helps you a lot to try and of course prevent it ►

PICTURES: RED BULL CONTENT POOL; ZAK MAUGER







PICTURES: STEVE ETHERINGTON; MARK SUTTON

As Verstappen tries to claim his first world championship the man standing in his way, Lewis Hamilton, knows exactly what it takes to win the title

from happening. You have to try and be as perfect as you can be in every single department, especially when you are fighting for the championship, you need to have that sorted.

"But I think from our side overall, operationally, we are definitely one of the best out there. That's, of course, very important. And of course, also, it gives you a lot of confidence as the driver, heading into a race.

"It's been really, really enjoyable to us. It's a great group of people to work with. Everyone, I think, wants the same thing, they want to win and they are very motivated and driven. And I'm very happy to be part of that."

Last but not least among the factors behind this year's Red Bull title challenge is Honda. The Japanese manufacturer announced last year that it would be closing its Formula 1 programme at the end of 2021. It would have been logical for Honda to stop developing its power unit, but...

"...they absolutely didn't!" says Max. "I would say it's exactly the same. I mean, like before, they're super committed, they are pushing flat out until the end, new bits arriving, you know, upgrades... Yeah, it's flat out. They already said that, you know, 'we are not going to clamp down on development until the last race, we keep on pushing the whole season'. And that's, of course, amazing. Also because of that, you know, we are where we are right now in the championship. So yeah, it's really amazing to see that."

Of course, there's pressure. Verstappen is fighting for the title against a seven-time world champion, the most successful F1 driver in history, who knows exactly what it takes to win the title. But to be fair to Max, he's been almost faultless through the first two-thirds of the season. After retirements in

Honda's Masashi Yamamoto and Verstappen in Monaco.
The continued engagement of the engine supplier has impressed Max

Baku and Silverstone and scoring just two points in Budapest, Verstappen managed to wrest back the lead of the championship going into the autumn.

Luck hasn't always been on his side, and one could argue it was Hamilton who's been getting the rub of the green more often

this season. Thanks to red flags at Imola, Lewis got the chance to make amends for his error there, while in the aforementioned Budapest race he escaped the first-corner melee, as his championship rival was left to race with a "half-car" after the restart.

And while you can also add ►

"HONDA ARE SUPER COMMITTED, THEY ARE PUSHING FLAT OUT UNTIL THE END, NEW BITS ARRIVING, YOU KNOW, UPGRADES... YEAH, IT'S FLAT OUT"



DUKE®

Over 50 incredible years of F1®



Own it forever

The F1 FORMULA 1 logo, F1 logo, F1, FORMULA 1, FIA FORMULA ONE WORLD CHAMPIONSHIP, GRAND PRIX and related marks are trade marks of Formula One Licensing BV, a Formula 1 company. All rights reserved.

Buy now at **dukevideo.com** or call **+44 (0)330 088 5045**



FREE POSTAGE ON ALL CD, DVD & BLU-RAY ORDERS OVER £20

Duke and the Duke logo are registered trademarks of Duke Marketing Limited. All rights reserved.

DUKE®
V I D E O



PICTURES: ANDY HONE; MARK SUTTON

Verstappen knows that both he and Hamilton will continue to race hard in order to win the title and doesn't plan on changing his approach

The only time that Max needs to be number 1 this year is at the end of the season. His focus is on maximising his opportunities until then



the magic button misfortune in Baku and a pitlane crash during Sochi qualifying to the list of Hamilton's mistakes, there aren't many on Verstappen's card. Does going off-track in Bahrain while passing Hamilton make the cut? What about other track limits infringements, which cost Max pole and a point for the fastest lap in Portugal? When things have gone well, he's never finished lower than second in the first 15 rounds of the championship.

"It's still very close and a lot of things can change very quickly,"

"SO YEAH, WE RACE HARD, FOR SURE, BOTH OF US TO EACH OTHER, BUT WE'RE ALSO FIGHTING FOR A CHAMPIONSHIP, SO I THINK THIS IS A VERY NORMAL THING"


Max says of the title fight. "I think we're looking quite good. But every single race weekend it can look a bit different. Sometimes we're ahead, sometimes behind. It depends on the track layout as well. So I expect a very tight battle till the end."

There is a good chance this year's title fight will go right down to the wire. Verstappen has already proven he can be consistent, but also aggressive when necessary. His clash with Hamilton at Monza is a prime example – that he's not going

to leave his main rival an extra inch in wheel-to-wheel combat.

Some will say that at Silverstone he could've backed off, keeping in mind his lead in the championship. But settling for points in the middle of the summer, with more than half the season left to play out, might also not be the best idea. He may, though, need to think more about it towards the end of the year.

"You know, people can say what they want," Max says of his critics. "I have to focus on myself. And I think that's going very well. And then of course when things happen, it's easy to judge and say things afterwards. But I think my approach has been very good. And I had a lot of also unlucky moments this year where I lost a lot of points."

"So yeah, we race hard, for sure, both of us to each other, but we're also fighting for a championship, so I think this is a very normal thing. For me, I don't think a lot has to change. We just have to make sure that we stop losing points. We also have to maximise our own potential. And then, I'm pretty sure we'll do a good job." 

motorsport
collection

**LIFE IN THE
FAST LANE**

www.motorsportcollection.com



Pure Bull

After spending so many difficult seasons watching Mercedes clean up in F1's hybrid era, Red Bull has finally put together a package capable of fighting for the world championship. No surprise then to now see Max Verstappen and co. attacking the track with full force and zero compromise in pursuit of glory

ANDREW BENSON



RED BULL HAS ALWAYS APPROACHED FORMULA 1 ON THE FRONT FOOT. IT'S AN ATTITUDE ENCAPSULATED IN THE UNOFFICIAL COMPANY PHILOSOPHY: "NO RISK, NO FUN." ANOTHER CLICHÉ TO DESCRIBE IT, PERHAPS, WOULD BE: "GO HARD OR GO HOME."

It is a credo, a *modus operandi*, that goes right back to Red Bull's early days in Formula 1. When Red Bull joined the grid back in 2005, taking over the Jaguar team, Christian Horner decided the best way to guarantee success was to sign the greatest designer of his age.

So Red Bull's team principal went after Adrian Newey and tempted him away from McLaren at the end of 2005, a little over four years after McLaren had successfully fought off an attempt by Jaguar to do the same.

It was evident, also, throughout the title-winning years of the early 2010s, when Red Bull explored the limits of the technical regulations on a number of fronts in a manner that angered its rivals and even caused the occasional raised eyebrow and roll of the eyes from the late Charlie Whiting, then the FIA's F1 director.

And so it is obvious again in 2021, a season in which Red Bull has found itself in a title fight for the first time in eight years.

In Max Verstappen, Red Bull has found in many ways its perfect figurehead. A racing driver who simply refuses to compromise, who so far has refused to back out of any on-track confrontation with championship rival Lewis Hamilton, even if by doing so he is taking potentially damaging risks.

This is a team packed full of talent and ability, which never lost its hard competitive edge, even through the years of Mercedes domination when victories were but crumbs from the Silver Arrows' table.

Red Bull honed the finest pitstops in the field, kept a light-footed improvisational approach to race strategy, produced competitive cars, although the engines did not match them. All this made Red Bull the most consistent challenge to

Mercedes through the hybrid era, even if Ferrari was the team that got closest to upsetting the Brackley/Brixworth bandwagon in 2017-18.

So it should be no surprise that now, when Red Bull finally has a car and engine package with which to take on Mercedes on a level playing field, the result is a battle full of intensity, bite and combustibility.

IT'S THE RULES

Red Bull's conversion from occasional threat to consistent frontrunner has created one of the most compelling F1 seasons for years. Not since 2012, when Red Bull's Sebastian Vettel narrowly triumphed over Ferrari's Fernando Alonso, have two drivers from different teams competed so closely for the title for so long.

But 2021 is different from 2012 in a number of ways. First, in 2012, there was no doubt the Red Bull was a faster car. Alonso, for most of the second half of the season, was fighting a rear-guard battle against a rival in far superior machinery, trying to protect a points lead established in remarkable circumstances in the first part of the year.

And the inter-team fight, though tense at times, plumbed nowhere near the depths of Red Bull versus Mercedes this year. Plenty of other teams were competitive that year, and that diluted the Vettel-Alonso fight because they were not that often fighting for the same position on track at the same time.

This year, the dynamic is different. Red Bull has as fast a car as Mercedes, and Verstappen and Hamilton have been going at it toe-to-toe from the off. They have contested almost every race, and the tension has ratcheted up each time, with confrontations both on track and off.

But let's rewind a little. For this was not exactly an expected turn of events after Mercedes steamrolled the 2020 season, taking 13 wins to Red Bull's two.

There were signs that Red Bull was getting closer. It made progress through the year, after a slow start with a car that had a new aerodynamic philosophy – taking the approach to under-nose airflow Mercedes pioneered in 2017, and which it took Red Bull time to understand.

Red Bull's average qualifying deficit to





For the first time since 2013 Newey (below, left) and Horner know that Red Bull has a serious tilt at toppling Mercedes and delivering Max Verstappen a first world title



Mercedes in the first half of last year was 0.8s; in the second half it was down to 0.3s, and Red Bull went into the winter, after closing 2020 with a dominant victory in Abu Dhabi, confident of making further gains.

But it was the rule change ahead of 2021 that made the key difference. To keep cornering speeds under control, revisions were mandated at the back of the cars. And these, it is now apparent, affected Mercedes more than Red Bull.

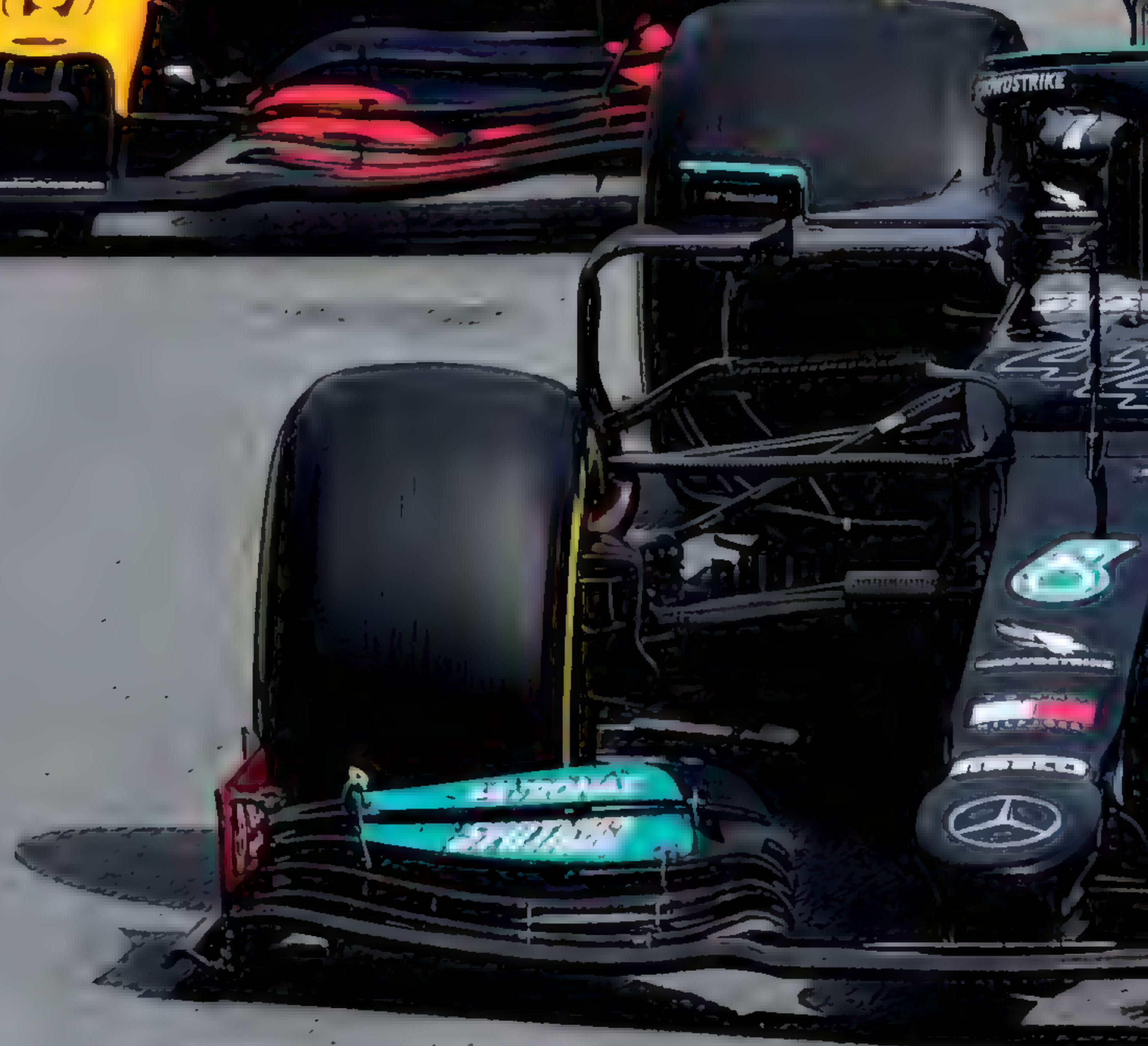
Mercedes – pioneer of the low-rake design ►

The RB16B has been a definite improvement on its predecessor, the RB16. Verstappen has used a less nervous car, and the team's fabled pit work, to great effect this season

PICTURES: STEVEN TEE; CHARLES COATES



Verstappen and Hamilton in Bahrain (below). Lewis won but the race confirmed Red Bull's improved package. The two drivers have been locked in battle ever since (right)



approach – was hit with a double whammy. Not only was its car more badly affected by the rule change, but the team found it harder than usual to claw back lost performance, too.

Red Bull, meanwhile, with a high-rake car, which generates its under-floor downforce in a different way, was not as badly affected. In addition, Red Bull used its permitted development 'tokens' to change the gearbox casing on its car, allowing designers to adopt swept-back rear suspension – another Mercedes innovation. This opened up space at the back

of the car, created more rear downforce, and calmed the RB16's inherent nervousness, its biggest weakness in 2020.

"Max instantly felt the new car was a decent step from the previous one," says Newey, "and was very complimentary. Coming out of the (pre-season) test, we felt we had a competitive package. But you never really know where that's going to be.

"It took the Bahrain Grand Prix to confirm that, yes, we were competitive. We didn't win that one – but it's been nip and tuck since then."

PICTURES: STEVEN TEE; ZAK MAUGER



“AS A RACE TEAM, WE’VE BEEN PRETTY SHARP. WE’RE TRYING TO CAPITALISE ON THOSE OPPORTUNITIES AND ENSURE THAT WE’VE GOT A CAR THAT’S CAPABLE THROUGHOUT THE YEAR” CHRISTIAN HORNER

ALWAYS READY TO WIN

After eight years out of the title fight, it might be expected that Red Bull would have to do a fair bit of mental resetting to get itself into the right mindset to take on the most successful Formula 1 team in recent history.

In fact, Horner says that was not the case, and his words reflect the fact that Red Bull’s essential nature as a team has never changed over the intervening period. The only difference in that time has been the competitive level of the car and engine combination.

“The senior structure of the team is predominantly the same as when we were running for those championships,” Horner says. “We’ve had tremendous continuity over the years. The majority of the pit wall was there back in the halcyon days of 2010-2013. So, I never really felt there’s been a gearing up. It’s just been a case of, y’know, we need to take opportunities with both hands.

“As a race team, we’ve been pretty sharp. We’re trying to capitalise on those opportunities and ensure that we’ve got a car that’s capable throughout the year. It’s been such a long period since anybody has given Mercedes any real challenge. It’s great and the whole team is loving being in a competitive position, loving going to races with a chance of winning them instead of taking opportunistic wins. There’s just a real sense of motivation, atmosphere, energy, within the whole team.”

Newey adds: “One of the great things about Red Bull Racing is that we’ve always had a good atmosphere in the team and that’s meant we’ve also had very good stability in the workforce, going back to a time even before we were first able to mount a title challenge.

“We lost out in 2009 but that, and I think the experiences of winning two very tight battles in 2010 and 2012, have moulded us, and given us a level of resilience that comes in very useful now. We know how to be the hunter and the hunted, which is a definite strength.”

ALL-OUT WAR

Red Bull and Mercedes have been fighting their battle on all fronts.

Mercedes, seeing Red Bull had a car advantage, has been seeking ways to reduce it. Mercedes questioned the flexibility of Red Bull’s rear wing – a technology several other teams were exploiting, too – and won a clarification from the FIA that required it to be strengthened. Mercedes also asked for a clarification on what was possible with pit equipment, which led to a second review that slowed pitstops.

Hamilton, for his part, has not shied away from casting aspersions on Red Bull – whether ►

"IN MANY WAYS IT IS A COMPLIMENT TO THE TEAM TO FIND OURSELVES UNDER SUCH SCRUTINY FROM OTHERS. WE HAVE EXPERIENCED THIS BEFORE, BUT I CAN'T REMEMBER A TIME WHEN WE HAVE RECEIVED THE SAME LEVEL OF BEHIND-THE-SCENES POLITICKING AND LOBBYING AGAINST OUR CAR" ADRIAN NEWEY



Verstappen's Baku retirement raised questions over tyre pressures and the tension between Red Bull and Mercedes

it be following the tyre failures in Baku, which Pirelli said were caused by teams (legally) running their tyres below expected pressures, and which led to yet another clarification; or questioning why it seemed suddenly to find a straightline speed advantage when Honda's second engine of the year was introduced, when power-unit design is supposed to be frozen in-season.

All of these have been annoyances for Red Bull, but this last accusation created particular resentment, because the reality was the RB16B's gain was down to developments that had generated greater downforce from the car and underbody, allowing for a set-up that runs less rear wing for the same ultimate downforce level. And this was a reflection of Red Bull winning the development war, at least in early summer.

In the final year before engine partner Honda officially says "sayonara" to Formula 1, Red Bull finally has an engine from the Japanese company that is on a par with Mercedes – and has a key advantage in holding on to electrical deployment for longer on the straights. Through the first half of the season, Red Bull also threw more development onto its car than Mercedes, although a couple of key Mercedes upgrades since the British Grand Prix have redressed the balance.

Like Mercedes, Red Bull is having to balance progress in 2021 against designing an all-new car to a revolutionary change in technical regulations for 2022 in the first year of a cost-cap. But the equation is different for the two teams.

Red Bull has found aerodynamic development easier to come by than Mercedes, and the lack of it made it easier for Mercedes to focus earlier on 2022. At the same time, having been granted a real chance to win a first title in almost a decade, Red Bull wants to ensure it puts everything it can into seizing the opportunity.

Overall, Mercedes' behind-the-scenes efforts to slow its rivals have not gone down well at Red Bull. Horner called the pitstop rule change "disappointing". On the manoeuvrings over technical issues, Newey says: "In many ways it is a compliment to the team to find ourselves under such scrutiny from others.

"We have experienced this before, but I can't remember a time when we have received the same level of behind-the-scenes politicking and lobbying against our car. Possibly if you look back to when we were exploring aero-elastics in 2010-11, then we were under constant scrutiny and would adapt to each changing set of regulations."

But the rivalry reached its zenith – or nadir, depending on how you look at it – following the

PICTURE: MARK SUTTON

FERRARI PARTS SPECIALIST

SUPERFORMANCE

LARGEST
INDEPENDENT
SUPPLIER OF
PARTS FOR
FERRARI CARS

OFFICIAL
DISTRIBUTOR FOR
HILL ENGINEERING

UNRIVALLED
ENGINEERING AND
TECHNICAL EXPERTISE



CONTINUOUS
REMANUFACTURING
OF OBSOLETE AND
UNAVAILABLE PARTS

DEPENDABLE
BIG ENOUGH
TO COPE
SMALL ENOUGH
TO CARE

FAST EXPRESS
WORLDWIDE
SHIPPING DAILY

WE'RE DEDICATED TO PRESERVING THE CLASSIC FERRARI SPIRIT

SUPERFORMANCE.CO.UK +44 (0)1992 445 300

CELEBRATING 38 YEARS FERRARI PARTS EXPERIENCE

UNIT G1 RD PARK STEPHENSON CLOSE HODDESDON HERTFORDSHIRE EN11 0BW
CONTACT OUR OFFICE AT ADMIN@SUPERFORMANCE.CO.UK



WE SUPPLY PARTS TO THE UK AND ACROSS THE WORLD



See what we're up to on instagram [@superformance.co.uk](https://www.instagram.com/superformance.co.uk) and
you can follow us on facebook.com/superformanceukltd



Verstappen's car is returned to the pits at the British GP after the clash at Copse. The gloves well and truly came off after this incident

collision between Hamilton and Verstappen at the British Grand Prix.

Horner did not pull his punches. He called Hamilton's driving "an amateur mistake, a desperate move" and "a massive risk". He said the move was "never on", and described the 10-second penalty the seven-time champion received for the incident, and from which he fought back to win the race, as "menial".

Red Bull took it one step further in its submission to the stewards seeking a review of Hamilton's penalty, writing that "Hamilton knowingly did not avoid contact with Max's car". They questioned whether the stewards had been influenced by a visit to their office by Toto, asking whether "the stewards were persuaded to seek his advice in making the decision on account of the standing his team and his driver purport to hold with the FIA".

Mercedes took exception to this, saying Red Bull's claims "over-stepped the line" and



PICTURES: MARK SUTTON; ZAK MAUGER

"FORMULA 1 IS A COMPETITIVE BUSINESS, IT'S COMPETITIVE ON TRACK AND IT'S COMPETITIVE OFF TRACK. THE COMPETITION IS FIERCE" CHRISTIAN HORNER

Monza, and with neither Verstappen or Hamilton willing to concede ground the resultant accident was almost inevitable



were both "below the belt" and "a concerted attempt by the senior management of Red Bull Racing to tarnish the good name and sporting integrity of Lewis Hamilton".

Wolff said he wanted to "bring a bit of respect back into the discussion". Horner responded by describing Mercedes' statement as "a little antagonistic", and insisting: "At no point did we question the objectivity of the FIA."

Outside of the two teams directly involved, some compared Horner's reactions to the Silverstone crash with his response to a collision

between Verstappen and Lance Stroll's Racing Point in practice at last year's Portuguese GP.

The two incidents were not the same – Hamilton was all but completely alongside on turn-in at Silverstone, which Verstappen never was in Portimão – but there were obvious similarities. At Portimão, it was Verstappen who had been trying to overtake, and whose front wheel hit Stroll's rear in a high-speed corner, as Hamilton's had Verstappen's. "If that had been a race," Horner said, in defence of his driver, "Max would have been deemed to be

up the inside, therefore the car on the outside should have given way."


He couldn't, as some rivals pointed out, have it both ways.

Horner's rhetoric was less confrontational after their second collision at Monza, but both he and Wolff have said there is little they can do to stop another incident happening again if one or other driver chooses not to avoid one.

WHATEVER IT TAKES

Readers will have their own views on the rights and wrongs of all these controversies – and the ones that are doubtless to come. Ultimately, though, all this is a reflection of a singular commitment to winning.

"Formula 1 is a competitive business," Horner says. "It's competitive on track and it's competitive off track. The competition is fierce. And in a competition like we are in, it's all about marginal gains and leaving no stone unturned.

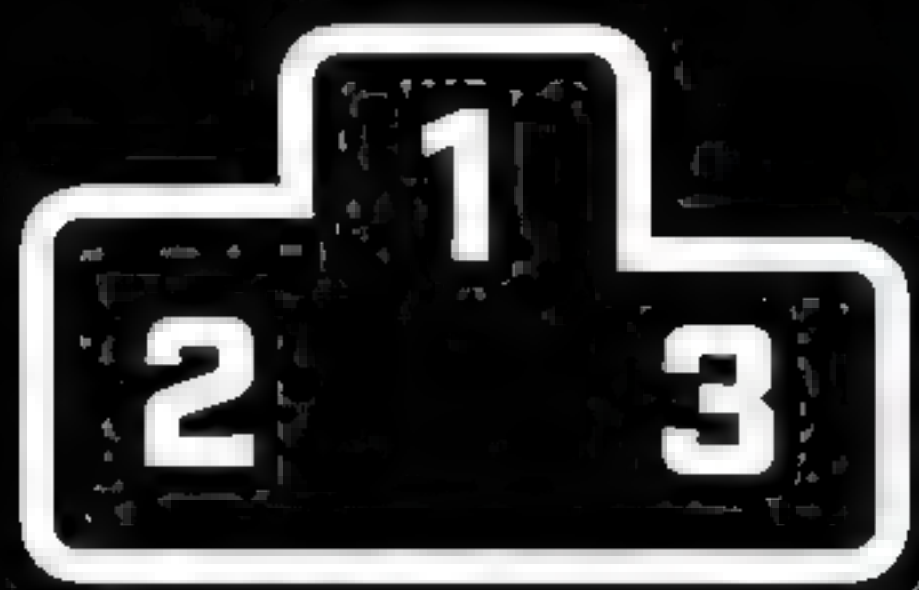
"It's the first time Mercedes have been in this position in the hybrid era and our focus is on trying to get the most performance we can out of our drivers, out of our cars, out of the whole team. And of course that rivalry will be intense." 

Andrew Benson is BBC Sport's chief F1 writer

AUTOSPORT

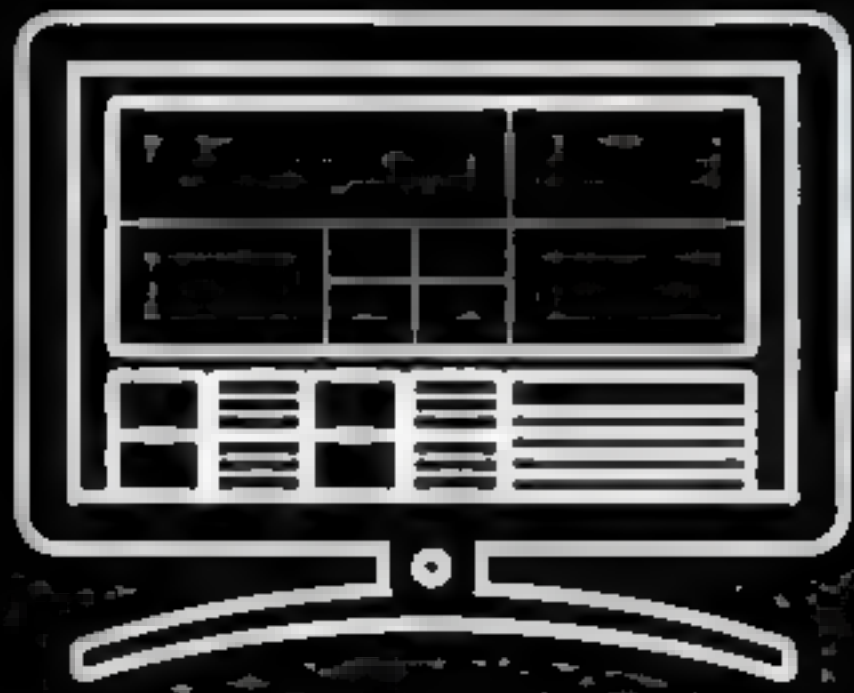
PLUS

SUBSCRIBE TO AUTOSPORT PLUS AND GET CLOSER TO THE ACTION



YOUR GP WEEKEND COMPANION

Every session covered -
the results, the talking points
and the biggest controversies.



COVERAGE THAT GOES BEYOND THE TRACK

Comprehensive driver news,
team announcements and
the latest from the paddock.

SMART INSIGHT, PUBLISHED DAILY

Expert opinion and technical
insight from the best team
of motorsport writers.



NO ADS, MORE PERFORMANCE

A faster, premium,
ad-free website experience.



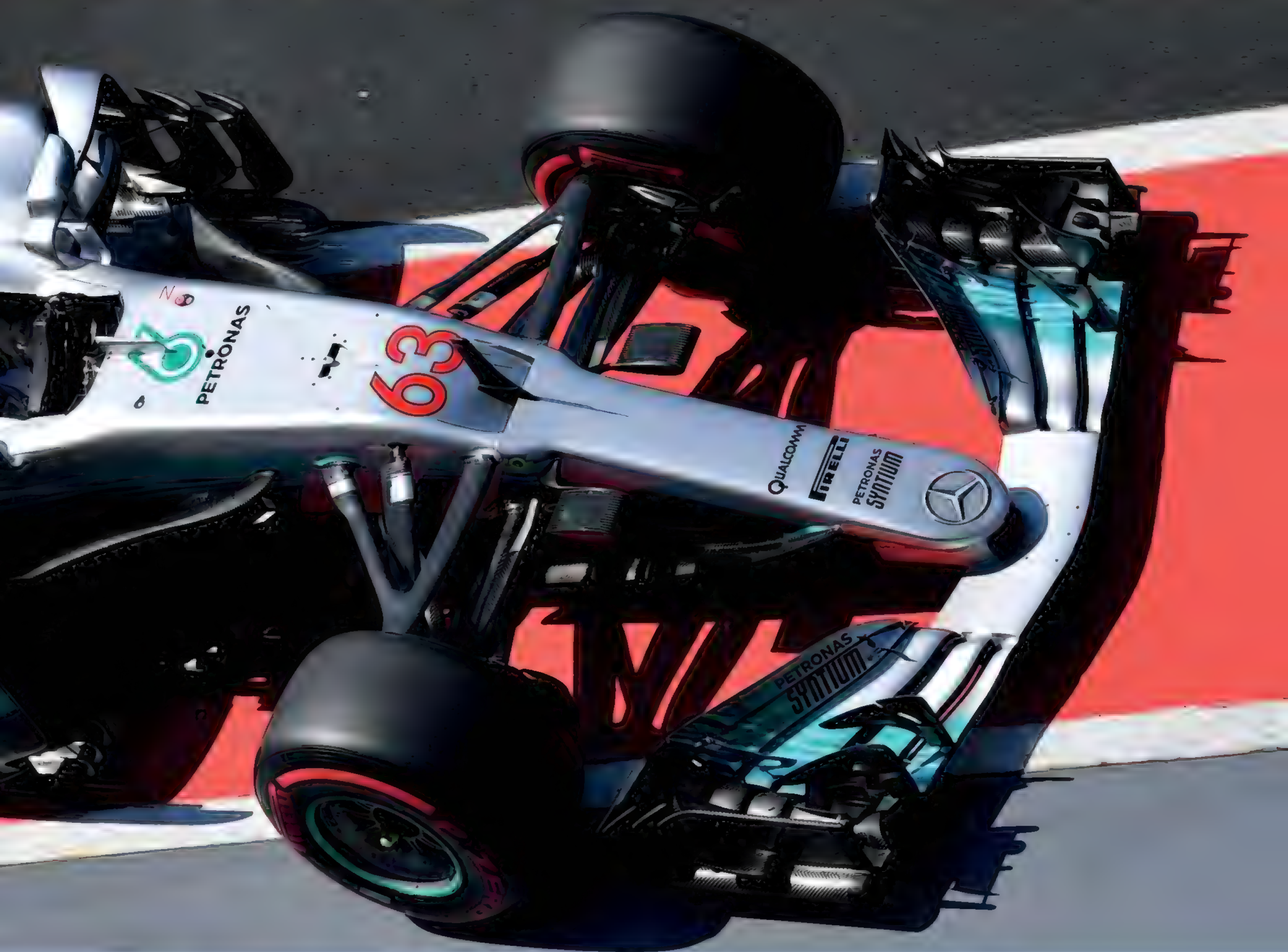
**SAVE 25% WITH
PROMO CODE:
GP25R**

AUTOSPORT.COM/PLUS

SILVER BU



LET



STEWART BELL
motorsport
AND MERCEDES

George Russell's ascent is almost complete, as he gets to become team-mate to seven-time champion Lewis Hamilton at Mercedes in 2022. Russell's made a big splash since joining the F1 grid in 2019, but Mercedes knew much earlier that it had a real star on its hands...

M

uch like a comic book superhero, almost every Formula 1 driver has an origin story worthy of a Hollywood blockbuster – given the horrifying level of commitment, talent, funds, results, luck, and sheer bloody-mindedness needed just to get a spot on the grid. Let alone get in the right car at the right time for a shot at victory.

So it is for Mercedes-bound, British young gun George Russell, who has been like a heat-seeking missile from the outset: flat-out, and expertly guided by the finest minds in the business. He's also not shy about the mission he's on.

"The clear goal is to become a Formula 1 world champion," he said, in the days leading up to the announcement. "[To do that] I want to make sure I'm the best version of myself physically, as a racing driver, off-circuit as well, and how I work with the team.

"It's so important, because all of these things have to be aligned to excel on the circuit. And I recognise you need that team, that you're just another cog in this massive chain that makes the success, and you've got to work at it."

Talk about a statement of intent, but politely matter-of-fact is Russell's style all over – and unwaveringly so, according to Gwen Lagrue, Mercedes' chilled mover and shaker in the junior series as its driver development advisor. Lagrue first met Russell in 2010, when the Brit was four years into his karting career, and had already secured the British MSA and Open titles.

"He was extremely mature, and his confidence definitely set him apart from all the others [he was racing] at that age," says Lagrue.

It's a big call, especially when you consider those others included Max Verstappen, Lando Norris, Esteban Ocon, Charles Leclerc and Alex Albon.

"When you are 13 or 14 years old you are not always confident in yourself," Lagrue continues. "George was really [set] apart on that. And very clever, the way he was racing was definitely something different. He didn't always have the best machinery, but he was always clever enough to do something special and extract the most of what he had in his hands, which I think he has also done with the Williams cars the last two years."

Russell continued karting until the end of 2013, by which time he'd become a European karting champion. The victories continued in cars, where he lifted the 2014 BRDC F4 title and the McLaren Autosport BRDC Award – beating, among others, Albon, who was one of the finalists.

Mercedes, though, was yet to pounce. But, by 2016 – when Russell was winning races in the FIA European F3 Championship – an approach was made for him to join the Silver Arrows' junior ranks.

"We developed quite quickly a good relationship, and always stayed in touch," says Lagrue. "I wanted to sign him already in 2013 or 2014, but it was not possible at that time. And when I moved to Mercedes, it was the first thing I did [in] making sure that George would join us."

Of course, Russell had already met Mercedes' head of motorsport, Toto Wolff, who well remembers their first meeting in 2013.

"He came to my office, all alone in a black suit and a black tie, it must have been his communion suit, because it was a bit tight, and a PowerPoint presentation," says Wolff, who gave

the green light to Russell just a few years later.

Russell's first challenge as a Mercedes junior was the 2017 GP3 Series, but it wasn't a walk in the park – despite a standout win, one of four claimed that season, at Monza following an elbows-out three-way battle with ART Grand Prix team-mates Jack Aitken and the late Anthoine Hubert.

"I think this season was, and even the F2 one the year after, not that easy," says Lagrue. "Both were difficult seasons, which was good in a way because we had to face some difficult moments.

"I think where he improved the most was physically. He became a real athlete at this time, but also mentally he was a bit stronger. He managed to also be a little bit calmer facing the more difficult moments.

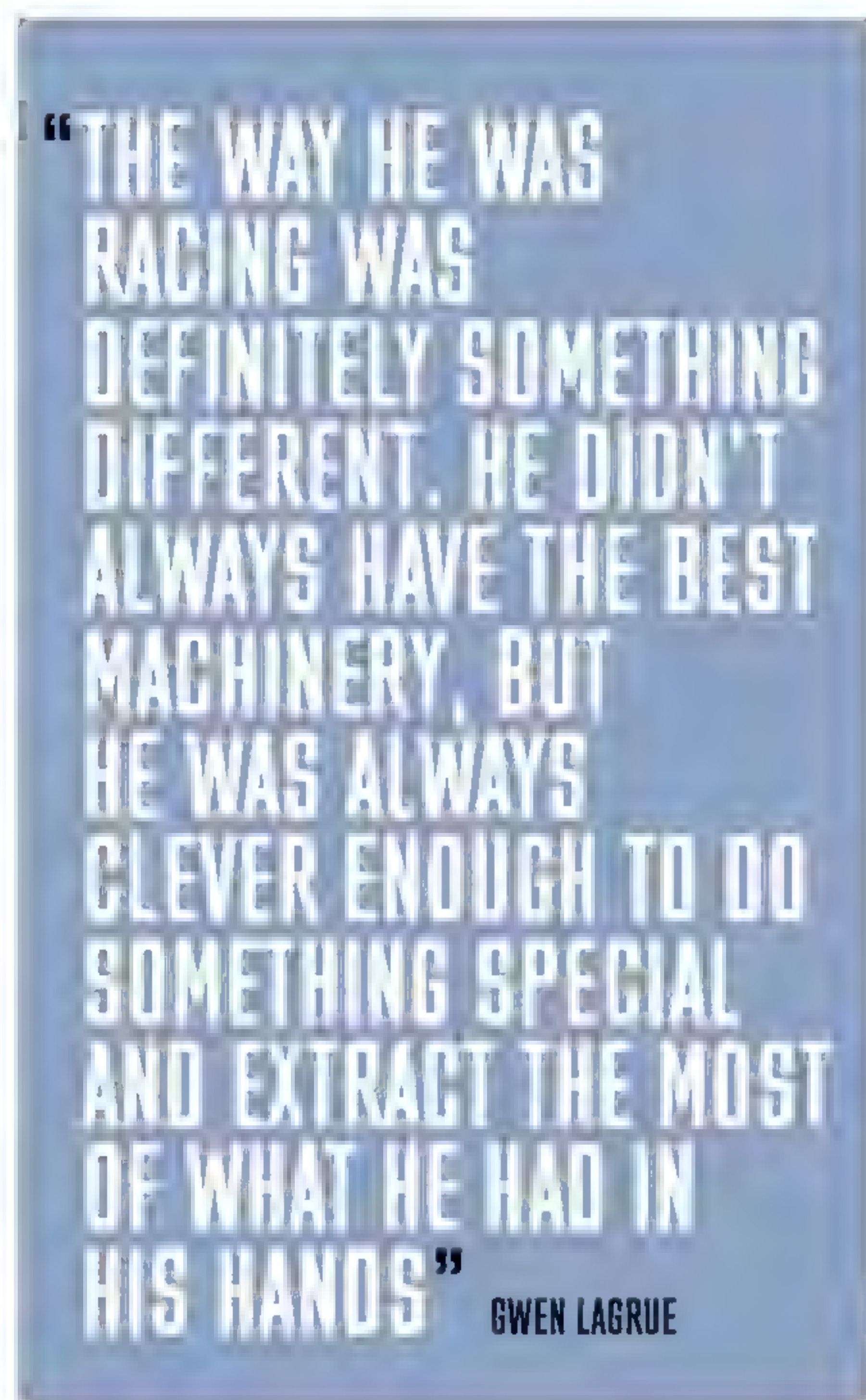
"We worked quite a lot on the level of stress. It was small details, but the combination of these made him – through GP3 and F2 – ready for F1."

Arguably his drive of the season, though, wasn't Monza – it came in the penultimate round at Jerez, despite no win to speak of. It wasn't his overtake of title rival Jack Aitken in the Sunday sprint, nor the fact that fourth place and points for fastest lap put the crown – the first for Mercedes' junior program – out of reach for his competitors.

"I don't know if anyone knows this, but George was really sick the week of Jerez," Lagrue says, over Zoom from his Californian hotel room. "He had an ear infection and we had to fly him with a medical plane to the track because he was not able to fly commercial because of the risk of having a more serious infection. At the first day of the [pre-event] test, he was still not feeling good. But, he still managed to win the GP3 championship, even though he was not [feeling] well at all."

Russell also faced his demons in F2, despite claiming the crown with a 68-point advantage at the end of the season to runner-up Lando Norris. Monaco was the watershed moment – with Russell hell-bent on bouncing back after two DNFs, accidents in the Principality that dented his confidence.

"After that we had to do a reset," says Lagrue. "We had a ►



Russell's first full test for Mercedes was in Hungary in 2017 (see previous page) and he subbed for Lewis once in 2020. In 2022 he will be Hamilton's team-mate...





triple-header, which was France, Austria and Silverstone. And we said, ‘OK, we have three races in a row. If we are able to win them, and to be the leader after these three races, then we put ourselves in a very good position to fight for the title’.

“We approached these three races as a mini championship, and he did it really well. It was a key moment on the climb to the Formula 2 title.”

But, while Russell’s personal team, including Mercedes’ Lagrue and physio Aleix Casanovas, kept Russell calm, focused, and performing, sometimes his ambition got the better of him. And it’s something that his then-GP3 boss at ART, now team principal at Alfa Romeo’s Formula 1 team, Frédéric Vasseur remembers well.

“The approach of George, he’s a very, very pushy guy. Very demanding for the team, sometimes too much. And I’ve had tough discussions with George about this,” Vasseur told F1’s *Beyond the Grid* podcast in 2020.

“But, he’s also very demanding on himself. In the end, it’s the only way [for you] to survive and improve and he has the good approach. He did a fantastic season in Formula 2, when he was winning as a rookie.”

Of course, by this time, Russell had notched up several Formula 1 tests, specifically for Mercedes – starting from 2017, with a private session in Portimão, and official in-season test at the Hungaroring. He also racked up a further five days testing in 2018, shared across

the Silver Arrows, Force India and Williams.

Russell also smashed the Hungaroring unofficial track record testing the W09, and had already impressed in 2017 FP1 outings for Force India in Brazil and Abu Dhabi. But, you might be surprised to learn these barely register for Mercedes.

“It’s really just another step in his preparation, and matching our expectation to make sure that the kid is starting to show us that he could be someone we could put [in the car] in the future,” Lagrue says.

“From there I would say that the pressure changed, because it was on us to find an F1 seat for the 2019 season. He was doing the job in F2. Every time he had an opportunity, whatever we asked him: simulator, test, FP1s, he did a perfect job. So we started to think OK, now we need to find a solution for 2019, because he deserves it, and that’s our job to put him in F1 now.”

And Russell’s star has only continued to ascend during the past three seasons with Williams in F1. He worked hard to convince the team to sign him in the first instance, and even harder to overcome the limitations of cars that have not always been easy to extract speed from. Russell has evolved at every step too, honing his driving skills and becoming a team leader inside the cockpit.

“The great drivers can adapt quickly to the situation and conditions: this is the grip level I have, this is the set up I have, and right now I can’t change either no ►

“WHATEVER WE ASKED HIM: SIMULATOR, TEST, FP1S, HE DID A PERFECT JOB. SO WE STARTED TO THINK OK, NOW WE NEED TO FIND A SOLUTION FOR 2019, BECAUSE HE DESERVES IT” GWEN LAGRUE

Russell clinched the 2018 F2 title in Abu Dhabi, having spent the preceding months in dialogue with Williams over an F1 drive

A detailed black and white photograph of a Formula 1 car's engine and chassis, showing various components like the intake manifold, cooling ducts, and tires. The image is used as a background for the advertisement.

motorsport.com

P R I M E

EXPERIENCE MOTORSPORT ON A WHOLE OTHER LEVEL

✓ **UNMISSABLE STORIES
AND OPINION**

✓ **EXPERT INSIGHT
AND ANALYSIS**

✓ **NO ADS,
NO DISTRACTIONS**

✓ **IN-DEPTH F1
COVERAGE**

MOTORSPORT.COM/PRIME



matter how vocal I am. So, how do I adapt my driving to extract the lap time?" says his Williams race engineer James Unwin.

"He's also very proactive with his use of electronic tools on the steering wheel. He makes regular adjustments to fine-tune balance. It requires some extra mental capacity to do this for 70 laps!"

Russell has mostly dominated his Williams team-mates, first Robert Kubica and then Nicholas Latifi. Recent qualifying performances

for Williams in adverse weather conditions have been outstanding, and of course there was last year's Sakhir Grand Prix, where Russell subbed at Mercedes while Lewis Hamilton recovered from coronavirus – and almost won...

"We knew he had the ability to deliver, as no doubt did Mercedes, so it was no great surprise," says Unwin. "He was firmly in the media spotlight that weekend and given a great opportunity to showcase his talent, but perhaps the unknown was how well he would cope with the extra pressure associated with it. It would seem he dealt with it pretty well, and I don't think he needed a PowerPoint presentation to sell himself after that weekend."

Although the outcome was brutal on Russell, it was another good lesson as far as Mercedes was concerned. No matter how tough it felt at the time.

"He did everything he could of course to win that race, but didn't," Lagrue says. "In my eyes, which might sound stupid or crazy for many people, but I think it's good that he didn't win it. He won so many things that weekend, of course. But he still

"HE MAKES REGULAR ADJUSTMENTS [AROUND THE LAP] TO FINE-TUNE BALANCE. IT REQUIRES SOME EXTRA MENTAL CAPACITY TO DO THIS FOR 70 LAPS!" JAMES UNWIN


didn't win the race, unfortunately for him and the team. But, in my eyes, into this process, making George a future world champion, it's good that he didn't win it."

Russell has instead arguably now won a greater prize: that seat alongside F1's most successful driver ever, and the chance to prove himself at the front of the grid race in, race out. Russell has already seen what it takes to thrive in this environment, having dovetailed his F2 duties in 2018

with a Mercedes reserve driver role. And what it really takes is relentless hard work – to the Brit's initial surprise.

"I think he realised the amount of work Lewis [Hamilton] and Valtteri [Bottas] do," Lagrue explains. "Maybe he was thinking that driving a Mercedes car, you have an advantage and it probably makes your life easier than the others because the level of performance at that time was a little bit higher than the others."

"He learned so much that year. And I think he was like a sponge in the garage, receiving all the information, paying attention to every single detail and he was projecting himself. 'OK, this will probably be my team in the future, so I need to know all the guys. I need to understand how they work. They all love Lewis and Valtteri, so I need that myself and to make sure the team will be behind me'."

No doubt Russell will spend every waking moment at Mercedes' Brackley base over the winter, putting those lessons into practice, getting ready to hit the ground running in 2022 and continue his irrepressible rise to the top of Formula 1. 

Russell with Toto Wolff in the Mercedes garage at the 2018 Chinese GP. As Merc's reserve that season he spent the time learning as much as he could...

RYOBI

AS SEEN ON
TV



**3-IN-1 NOZZLE -
TURBO, FAN OR
SHOWER**

**LESS
SHER
STARTER KIT**

this multi-purpose 22bar power

- Power Washer (RY18PW22A-140)
 - 4.0Ah Battery
 - 1.5A Charger
- 6m Syphoning Hose
 - 3-Year Warranty*



3
YEAR*
WARRANTY

THE BOSS WILL SEE YOU NOW

Within five years, Aston Martin plans to challenge for the world championship. A goal easily stated, somewhat more challenging to achieve. But do you want to argue with Lawrence Stroll?

WORDS STUART CODLING
PICTURES GLENN DUNBAR

Tread the streets of St James's and you echo the footsteps of the great and the good, the influencers and dealmakers, the movers and shakers of a corner of London which has accommodated the elite since Restoration times. At its heart, St James's Square; for at least two centuries one of London's most fashionable addresses until the arrival of gentlemen's clubs and – ugh, whisper it – *commercial establishments* prompted the aristocracy to up sticks for nearby Belgravia.

Brass plates by the sturdy doors of these imposing high-ceilinged edifices now allude to the present occupants' line of work. These are no longer houses, since 21st century commerce has no need of bedrest. Within, you will find businesses carrying opaque and anodyne titles, and specialising in such as *merger arbitrage* and *special situations equity* and *fundamental bottom-up approaches to portfolio construction*. Through these vestibules flows wealth to an order of decimal places by which a mere millionaire is a veritable beggar in comparison.

The northern side of the square holds the grandest buildings, erected on the most spacious plots. Number 5, formerly Wentworth House, built in the classical Palladian style in the 18th century by Matthew Brettingham the Elder, is one such. Lawrence Stroll set a new rental record for London when he established offices here in 2017.

A blue plaque on the adjoining building denotes number 4 as a former residence of Nancy Astor, the first woman MP; it is now the home of the Naval and Military Club, aka 'The In and Out', whose president was the late Prince Philip, and which does not publish its membership fees. Further along the eastern row, hoardings cover the demolished remnants of Norfolk House, where General Dwight D Eisenhower drew plans for the D-Day invasion. A £72million office building has been commissioned here by an 'undisclosed client'. Historic wealth, power and ambition thrum and sizzle through this area like a high-voltage circuit board.

GP Racing buzzes the door of number 5 and is whisked inwards to a space of restrained opulence: a waiting area with twin leather armchairs and a wide stone staircase leading to the offices of the man himself. Lawrence Stroll, dressed business-casual, greets us from behind a broad desk illuminated by a pair of tall, broad windows which offer a panorama of the square below. Though we're speaking to a man with many business interests, only one of them is reflected in the décor: an action photograph of an Aston Martin F1 pitstop on the wall behind the desk, and trophies

above the fireplace. The cars are designed and built 70 miles from here in considerably less grand surroundings, but that is about to change and it is from here the strings are being pulled. ►







Stroll made it clear
to GP Racing that
Formula 1 will be a
key pillar of the Aston
Martin group

In mid-September Stroll, alongside JCB chairman Lord Bamford – one of the co-investors Stroll brought to the table to rescue the troubled car brand 18 months ago – broke ground on the new Aston Martin Formula 1 factory near Silverstone which is expected to cost between £150m and £200m. But remember we're sitting in St James's, where capital outflows of millions are but chump change. The new facility, which the boss prefers to call a campus rather than a factory, will form the hub of what Stroll aims to grow into a billion-dollar business under the Aston Martin Performance Technologies umbrella.

"Sadly, it's two years behind the timeframe originally planned because of COVID," says Stroll. "I'd hoped we would have been in it by today."

"The most essential tool for any Formula 1 team to have the latest and greatest state-of-the-art campus – it's a campus, not a factory. We will have three buildings with facilities including a restaurant, a fitness centre and a windtunnel. I think it sets us worlds apart from our competitors."

"You know, it's a huge investment. To win in Formula 1, it's about the right leadership and vision and, like any business, it's about having the right finances in place. And quite honestly, with the new financial regs, it really does level the playing field. We will no longer be outspent by our competitors – we will have the same budgets as the top two teams."

Therein lies the difference between Lawrence Stroll and others who have acquired distressed assets in Formula 1 and the wider automotive world over the past few years. He has access to capital and isn't afraid to spend it – so long as the risks are properly understood and mitigated. That's a stark contrast with so many wannabe team owners who have looked to swoop when the going is cheap, but using funds leveraged against that team's future earnings: in effect gambling with somebody else's money. When Stroll's ventures require others to come in and share the risk,

he has a track record of returning a significant profit for himself and has co-investors – which is why so many of them happily return to the watering hole.

Aston Martin co-investor Silas Chou, for instance, achieved splendid returns on his investment in the relaunch and IPO of the Michael Kors fashion label, orchestrated by Stroll.

It helps that in the post-Ecclestone era, F1's commercial rights holder takes a more collegiate and collaborative approach to growing the business. The budget cap – agreed in the face of much gnashing of teeth from F1's entrenched big-spenders – and the \$200m 'entry ticket' enshrined in the latest Concorde Agreement have put the competitors on a better financial footing. While the cap isn't going to transform the competitive landscape immediately, it means F1 is no longer a bottomless pit into which the frontrunners lob money indiscriminately. Together with the new barrier to entry which enshrines each team with a franchise value, it makes all the competitors much more investible. When Stroll rescued what was then known as Force India from administration in the summer of 2018 this was not yet a done deal, but was certainly part of the plan for F1's new owners.

"I had several meetings with Chase [Carey, F1 CEO] at the time," says Stroll. "And that was a very, very big part of my decision-making process whether to buy the company or not. It had a big influence on my decision. If there would have just been no spending limits, I couldn't compete."

"People – human capital – is a very important factor. I would never have bought a team fumbling around in ninth or 10th. What impressed me, and the reason for the acquisition, was this was a team operating on a £90m budget and only 400 headcount [at the time, Mercedes was spending £332m per year, and had 900 staff at Brackley alone], but two years in a row it was fourth in the championship, and it would have been three years without the administration. All on a third of the budget and less than half the headcount of the competitors above them. So there was already a nucleus of 400 very passionate people – that famous expression, punching

above their weight. They were doing more with less than other teams, so this was an incredible opportunity to build on an already strong base. We weren't starting from zero. ►

"YOU KNOW, IT'S A HUGE INVESTMENT. TO WIN IN FORMULA 1, IT'S ABOUT THE RIGHT LEADERSHIP AND VISION AND, LIKE ANY BUSINESS, IT'S ABOUT HAVING THE RIGHT FINANCES IN PLACE. AND QUITE HONESTLY, WITH THE NEW FINANCIAL REGS, IT REALLY DOES LEVEL THE PLAYING FIELD"

**“I HAD THIS DREAM
THAT, BEING BASED
AT SILVERSTONE
FOR NEARLY THREE
DECADES, IT NEEDS
TO BE A BRITISH
BRAND. AND FOR ME
THERE’S ONLY ONE
BRITISH BRAND THAT
WARRANTED BEING ON
THE F1 PEDESTAL.
AND THAT WAS
ASTON MARTIN”**

“When the company [Force India] went to administration, there was not a plan at that point other than trying to focus on whether we got the asset. After getting the asset, yes, it was a very clear vision of mine that this is an automotive company. And I had this dream that, being based at Silverstone for nearly three decades, it needs to be a British brand. And for me there’s only one British brand that warranted being on the F1 pedestal. And that was Aston Martin. It was kind of a dream come true.”

The COVID-induced delay to the building of the new ‘campus’ has worked in Stroll’s favour since the plans have evolved during the hiatus and accommodate new developments, chief of which has been a change of plan regarding the windtunnel. Originally this was off the menu since the team believed it could handle ongoing development by continuing to lease time in the Mercedes tunnel up the road. A disappointing 2021 campaign – disappointing, that is, based on the team’s form last season as well as its expectations for this one – is understood to be the chief reason for the *volte face*. Having cloned Mercedes’ low-rake aero concept, Aston Martin was similarly affected by the rules changes in the off-season and has struggled to develop its way back into contention.

During a Zoom press conference the week before *GP Racing*’s audience with him, Stroll explained chief technical officer Andy Green had sold him on the advantages of an in-house tunnel, the crux of the conversation being “if you really want to be world champion, it’s a tool you’re going to need”. By signing off on it Stroll is in effect betting against a windtunnel ban, presently mooted for 2030, ever happening.

“It cost a bit of money, that change of mind,” said Stroll at the time. *GP Racing* gently presses him on this, since it’s become almost a cliché of F1 news writing that any story about him will reference his chequebook before the first paragraph is over. And yet he obviously didn’t get where he is today by squandering investors’ funds or, indeed, backing many losing horses.

“Actually none,” he says. “We invest to build a business for the future. I don’t think I’ve ever spent a lot or lost.”

The car manufacturer Aston Martin was an altogether different class of distressed asset compared with the F1 team which has now been folded into the brand. While it was doing most things right in terms of its model range – an SUV was on its way, as well as a high-profile halo car designed in collaboration with Red Bull – its stock exchange flotation in October 2018 greatly overvalued the business as it stood. When demand inexplicably plummeted over the course of 2019 its share price followed

a similar trajectory and it went to the market to raise more cash. Stroll’s consortium rescued it from going bust for the eighth time in January 2020, and when the pandemic nudged the finances further into crisis it was Stroll who stepped in, via his Yew Tree investment vehicle, to provide what is described in the London Stock Exchange filings as “£55.5m of short-term working capital support”. In effect, keeping the lights on and the salaries paid. The LSE filings adumbrate the consortium’s rescue plan – better matching of supply to demand, more focus on marketing, headcount reductions in key areas, delaying development of certain

models – but *GP Racing* remains curious as to where the seasoned entrepreneur draws the line between a distressed asset with potential and an irredeemable basket case.

“You sit down with smart people and do due diligence,” he says. “This is beyond a brand, it’s a 108-year-old, iconic British institution. Companies like this don’t come up very often, and you can’t recreate them – it would take another 108 years. For me it is by far the premier British luxury brand, and probably the greatest global premier luxury brand.

“And then it was a matter of understanding, well, what happened to the business? Why did it go off-track? In the case of Aston Martin, after a few days of due diligence it became very clear to me what happened, and what needed to be done.

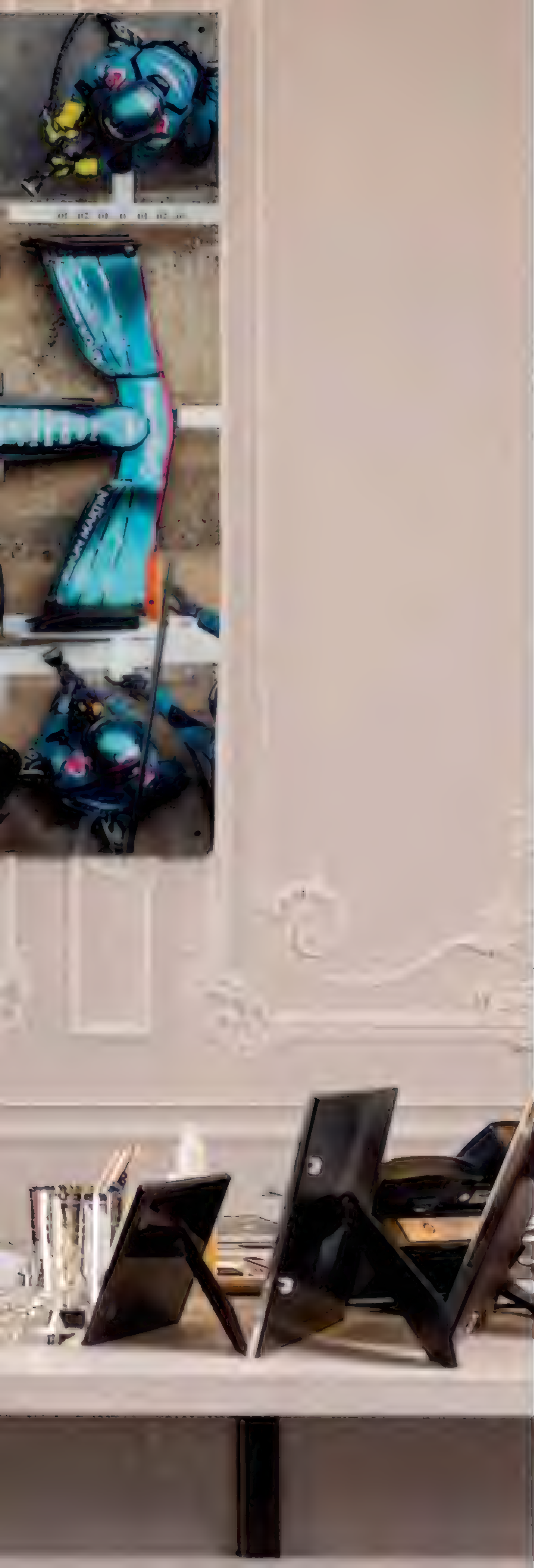
“There was a lot of risk when I took on the job [executive chairman] in April last year, there were five boxes that needed to be checked. I’ve checked every one and now we’re on the road to success. The business is now de-risked and the momentum is just phenomenal, as you’ve seen in our numbers. And as I said in my last quarterly report, I’ve delivered everything thing I’ve promised. So was there risk? Absolutely. Is that risk today behind us? Completely.”

Those figures are impressive, albeit with the caveat that comparing the first half of 2021 with the first half of 2020 (revenue up from £146m to £499m, operating losses cut from £159m to £38m) is complicated by the effects of the pandemic. Aston Martin has benefitted from pent-up demand, but the business still carries a large debt burden and may be affected by the stormy weather forecast for the global economy. The City seems to take this view since share price growth has stalled since the beginning of the year after a strong recovery in the second half of 2020.

There are questions, too, about the realism of the stated aim of making Aston Martin a world championship-winning team within a five-year time frame. Firstly, as Renault amply proved while shifting its own goalposts ►







"I DON'T SEE HAVING A PERFORMANCE TECHNOLOGY BUSINESS IS ANY DISTRACTION FROM F1. THE GOAL OF THIS IS BEING WORLD CHAMPIONS IN F1, THAT IS THE PURPOSE OF THE NEW CAMPUS AND RECRUITMENT DRIVE. IT'S ALL F1 BASED AND FOCUSED"

over the past five years, this is easier said than done. Potential uncertainties include the completion of the campus (the main building should be ready in 18 months but the windtunnel won't be operative until 2024) as well as the starting dates of new staff, owing to gardening leave. Alfa Romeo's Luca Furbato will join as engineering director early next year, but putative technical director Dan Fallows remains the subject of a protracted wrangle with Red Bull, where he is (or was) head of aerodynamics.

The scope and scale of all this headhunting is a further indicator of Stroll's seriousness about building his F1 team into a world championship contender as part of a wider "billion-dollar business". He talks about the new campus as being different in form and function to the McLaren Technology Centre: the architecture will both strongly reflect the Aston Martin brand and be conceived as a pleasant environment to work in, the better to recruit and retain key staff.

"We're gonna have what I think will be the best fitness centre by far in F1," he says. "We'll have outdoor running, walking and training, therapists, fitness instructors and physiotherapists. It's all about healthy body, healthy mind. In the plans for the three buildings on campus, the centre one is focused on that, it's about well-being and it will have by far the best restaurant in F1. We're going to have a lot of farm-to-table, fitness classes during the morning and evenings. The better you feel, the better you think."

While road car design and construction will continue in Aston Martin's base at Gaydon, some design and technology function is expected to transfer to the new Silverstone campus, where they will be joined by other businesses "to be determined". F1 and the road car business are now operating under the wider umbrella of Aston Martin Performance Technologies, to which Stroll has recruited former McLaren man Martin Whitmarsh as CEO.

McLaren recently sold off its Applied division, a move its CEO, Zak Brown, told *GP Racing* was a strategic decision because McLaren was a racing organisation rather than a technology company. Stroll, interestingly, doesn't regard these as mutually exclusive.

"Formula 1 will be one of the main pillars by far in this group," he says. "We will also be having other businesses under Performance Technologies, and in years to come other racing activities perhaps. We will have a group of 700-800 professionals who will have expertise that can be shared in various other fields of businesses."

"I don't see having a performance technology business is any distraction from F1. The goal of this is being world champions in F1, that is the purpose of the new campus and recruitment drive. It's all F1 based and focused."

He pauses, then leans forwards, fixing *GP Racing* with a stare to emphasise his point: "Very focused!" 

THE ICEMAN GOETH



Kimi Räikkönen is the last of a certain type of racing driver. His friend and former Ice1 Racing rally team PR man **Anthony Peacock** explains why there's nobody quite like Kimi – and why Formula 1 will miss him (but he won't miss F1)



Don't expect a fanfare in Abu Dhabi, or any grand curtain call designed to soak up two decades of accumulated Formula 1 glory. But do expect a small farewell party. It's just that you won't be invited.

Kimi Räikkönen, in a move which surprised almost nobody, finally announced his decision to retire at the beginning of September – although it's something that he had settled on for nearly a year. And that's why his announcement came almost as an afterthought, in the form of a somewhat laconic Instagram post that started off with: "This is it."

Kimi likes to get to the point and not waste time with words, a trait he shares with many of his fellow countrymen. They have a saying in Finland that goes along the lines of "silence is gold, talking is silver". And Kimi has always preferred gold.

But it's not that Finns don't like talking. Instead, it's that they just don't like small talk. When Kimi is actually in the mood to talk, there's almost no stopping him. But he likes to talk only about things that are important or interesting to him. And the questions posed during Formula 1 press conferences invariably fall into neither of those two categories.

So he'll probably just slip quietly out of Alfa/Sauber's sliding glass door after he completes his last race in Abu Dhabi. The thought of valedictory speeches, public displays of affection, or worst of all, some sort of photo opportunity cake – which might just end up in his face – are anathema to him. It's hard to know what Kimi's last words from the cockpit of a Formula 1 car will be, but the best bet is "bye". Or nothing.

Then he'll head off into the starry night, and hopefully onto some nearby hotel suite to reacquaint himself with the real glory days – such as when he went on a 16-day bender after finishing on the podium at the 2013 Bahrain Grand Prix. He sobered up in time to repeat that result at the Spanish GP, lending credence to his long-held theory that drink between events never affects him and that he actually performs better when free to be himself.

Now, with that tedious 'between events' bit removed from his lifestyle, he's completely at large to carry out his plans. These plans amount to

precisely nothing: in the short term at least.

It's at moments like this that Kimi truly stands out as the only sane inmate in the asylum. If you've won 21 grands prix, earned more millions than you can spend, driven all the cars you want, and have a yacht as well as a beautiful wife and kids at your scenic home in Switzerland – not to mention a well-stocked drinks cabinet – why on earth would you have any plans, other than systematically emptying the said cabinet and wondering idly what to do next?

Having claimed a winning ticket in life's lottery from a young age, Kimi's definitely not the sort of winner who insists that good fortune doesn't change him and his work ethic. No way. He'll just do what amuses him, exactly when he feels like it (which is more or less what he's been doing up to now anyway). Because Kimi's a real expert at something that many people in F1 struggle with: having fun. And speaking his mind, however outrageous it might sound at the time.

When he finally walks out of those paddock turnstiles in Abu Dhabi and throws away his red all-access pass (don't expect him to keep it) the last stand of the real racing driver – a tribe that has been endangered since the late 1980s – will fall with him. Kimi's retirement marks the end of an era.

Don't get us wrong. The current generation of drivers are certainly nice guys and well-polished: some of them are even genuinely funny on occasions. But there's nobody else quite like Kimi. He was once asked what people did with their free time in Finland. "Fishing and fucking," was the answer. "And in winter, the fishing is bad."

Kimi is happy to embrace every vice going, but not at all self-consciously. His image is in no way manufactured: instead, he has an unreconstructed love of the louche that makes him one of the most genuine people you could ever meet. Who can forget his excuse for missing the presentation to Pele at the 2006 Brazilian Grand Prix – "I was just taking a shit" – or his spot-on identification of the best thing about Red Bull: "you can put vodka in it"?

For a driver blessed with an astonishing ability to make incredible ►



The many sides of Kimi Räikkönen: fun, family, Formula 1, rallying, and maybe the odd drink or two. And then there's his fans, of all ages, including Thomas, who got to meet his favourite Ferrari driver at the 2017 Spanish Grand Prix



amounts of money out of the sport – even when he went rallying in 2010, he was still being paid by Ferrari – Kimi is remarkably uncommercial.

During that time, he was asked to attend a sponsor function, which he didn't feel like doing. To be fair, it involved mobile phones and sounded pretty tedious, but people had apparently paid a lot of money to be there. He simply shrugged and suggested: "let's just give it all back."

One of the other things that Kimi didn't fancy doing during his WRC sabbatical was Rally Australia, on the grounds that it was "too far away." You can't argue with the geographical logic, although that stunt ultimately meant his Ice1 Racing team was excluded from the 2011 championship. Predictably, Kimi didn't care.

In rallying though, Kimi was able to show a little more of his true self, away from what he called the "goldfish bowl" of F1. He had no problem chilling out in the hotel bar of an evening (and yes, he'd buy the drinks): something that never happened in F1, where there were too many people in search of cheap headlines. "Actually the headlines are quite funny," he once said, inscrutably. "I can read them and find out what I was doing."

Kimi was also very good at rallying: the only thing that let him down was the ability to work effectively with pace notes, as he was so used to just driving a road as he saw it, rather than reacting to the instructions of someone sitting next to him. "Leave me alone, I know what I'm doing," doesn't really work in rallying.

With a bit more patience, he could have got on top of that issue.

And maybe in the future he will: he's been offered a test in Toyota's title-winning Yaris WRC. While you won't find him doing a full championship – that involves too many early mornings – it would come as no surprise to see Kimi doing a few bits of rallying for fun.

As former Citroën teammate Sebastien Loeb often pointed out, Kimi's car control is phenomenal. During rally tests, which consisted of going up and down the same piece of road, Kimi was often quicker than the nine-time World Rally Champion in the same car. And there was no doubt that he loved it: growing up in Finland, Kimi was driving a rally car (which belonged to his older brother Rami) long before he sat in a racing car. He drove it like he stole it, appropriately, because he did – much to Rami's chagrin.

For Kimi, the worst thing about motorsport was the media, while the only good bit was the actual driving. The parties were fun too – but you can have a party at any time, he points out, including at home (which is how he prefers it). The most exciting part of a race weekend is always the start, he once told a hapless journalist. And the most boring bit? "Now," replied a deadpan Kimi.

Because the Finn is as pure a racing driver as it gets. Along with bullfighters and mountaineers, as Ernest Hemingway famously wrote, they are the last of the true sportsmen. But bullfighting is mostly banned these days, all the mountains have been climbed, and now Kimi is retiring too. The bass line of the music has died.

Unfortunately for him, albeit aged 41 now, Kimi was still born a couple of



A LITTLE BOY WAS REDUCED TO TEARS AFTER HIS FAVOURITE DRIVER WAS ELIMINATED AT THE FIRST CORNER OF THE 2017 SPANISH GP. THOSE TEARS SOON DRIED AFTER F1 FOUND THE BOY AND BROUGHT HIM TO THE FERRARI GARAGE TO MEET KIMI, IN SCENES THAT WERE ALMOST NAUSEATINGLY HEART-WARMING

decades too late. His true era was that of his alter ego, James Hunt: whose name he has borrowed on a couple of occasions to enter snowmobile and powerboat races (as well as sporting Hunt's helmet for the 2012 Monaco Grand Prix).

The most charming part of this whole anecdote is the fact that the full gorilla suit Kimi happened to be wearing for the powerboat race is a mere side detail. Still, it earned him and his friends a prize for the best-dressed crew.

On another occasion, someone who should have known better asked Kimi in great detail what his helmet meant to him, hoping that the intricate design would somehow unlock a hitherto unopened window into his soul. Kimi digested the question, before replying blankly: "it protects my head."

What really protects his head though – in a psychological sense – is the invisible wall that he puts up around himself: an integral part of being "the Iceman". He explained his philosophy once, opining that whatever you say, people will just twist it. So the very best thing you can say is nothing at all. Funny, as we never had Kimi down as a Ronan Keating fan. He's more partial to Finnish metal.

That semi-permanent state of fifth amendment is ironically what has helped turn Kimi into a folk hero. The more he was aloof and taciturn, the more people loved it. This appealed to Kimi's sense of the bizarre.

Kimi thinks of most people as being pretty odd – and can you really blame him, given the human circus he's been surrounded by since he was 20?

He gets away with it by being utterly charming when he wants to. Just ask Thomas: a little boy in Ferrari kit who was reduced to tears after his favourite

driver was eliminated at the first corner of the 2017 Spanish GP. Those tears soon dried after F1 found the little boy and brought him to the Ferrari garage to meet Kimi, in scenes that were almost nauseatingly heart-warming.

Just like James Hunt – who won the 1973 Tour of Britain in a Chevrolet Camaro as well as prizes for breeding budgerigars – Kimi is an enigmatic man of many talents, with two distinct sides to him. The public person who is famous for silence and sunglasses, and a much warmer person – one fewer people get to see – who is engaging, generous with his time, and uproariously funny.

That's the real Kimi: the one who is just looking forward to leading a normal life now. Of course, 'normal' is always relative, but Kimi – father to two mini-me children – has calmed down a lot compared with the past. He still loves to tell his old war stories though, with a wolfish grin and that distinctive cackle that can light up a room. Those were the days, my friend.

And this is now. 



 **motorsport**
IMAGES
SHOWCASE

KIMI

The Iceman made his F1 debut over 20 years ago but Kimi Räikkönen has decided that this season will, indeed, be his last...

▲ When the time came to relax during a McLaren test session at Jerez in June 2003 Kimi, never one to be conventional, took the opportunity to grab some rays in the Spanish sunshine. His preferred location just happened to be part of the pitwall...

In association with **CARRERA**
EYEWEAR SINCE 1988





▲ Kimi's reputation for enjoying one of his country's finest products often preceeded him. These fans at the final race of the 2009 season, the Brazilian GP at Interlagos, were obviously hoping for a shindig, but for Räikkönen the party was almost over as he would leave F1 – for the first time – at the end of the year

► At the start of 1999 Räikkönen was still karting. By the end of the year he had taken part in a handful of Formula Renault races, the Formula Ford Euro Cup and Formula Ford Festival. Kimi then finished the season off collecting the trophies for winning the British Formula Renault Winter Series...



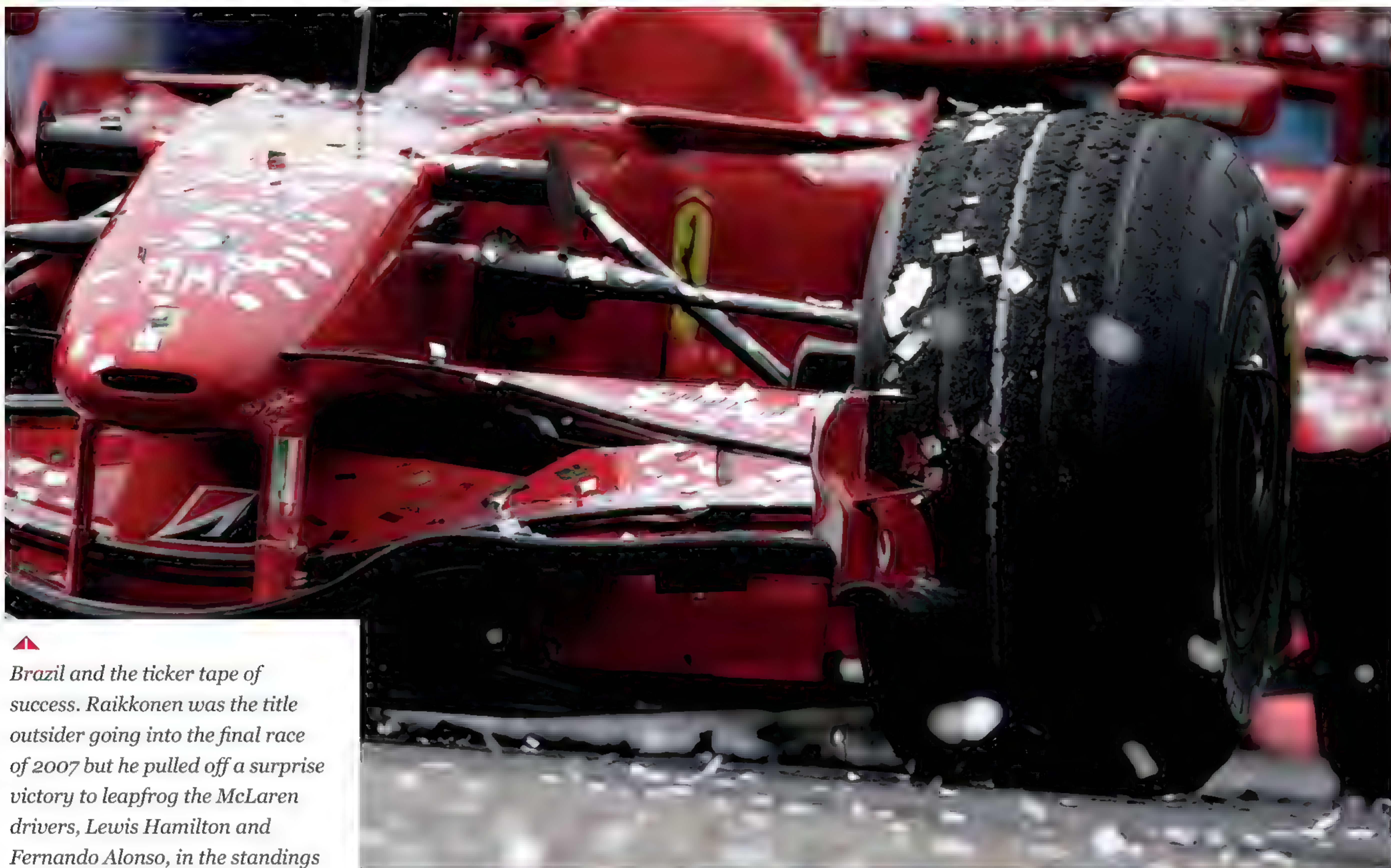
◀ Kimi and McLaren team-mate Juan Pablo Montoya had strong words after Montoya collected Räikkönen on the first lap of the 2006 US GP at Indianapolis, causing both cars to retire on the spot. Kimi left McLaren at the end of the season to replace Michael Schumacher at Ferrari



▲
2004 was a season of two halves for Räikkönen. The first half – in the McLaren MP4-19 – began badly in Australia, with this engine-related retirement, and got worse as he scored eight points from the first nine races. In the 19B he took one win and 37 points from the next nine races...

▼
Räikkönen built on his 2012 Abu Dhabi victory, with a win first time out in 2013. He made a two-stop strategy work and his Lotus-Renault triumphed in Australia by over 12s. Three more seconds meant that after five races Kimi was only four points behind title leader Seb Vettel...





▲ Brazil and the ticker tape of success. Raikkonen was the title outsider going into the final race of 2007 but he pulled off a surprise victory to leapfrog the McLaren drivers, Lewis Hamilton and Fernando Alonso, in the standings

▶ In the early part of Kimi's career his fellow Finn and double world champion, Mika Häkkinen, was his mentor. Seen here at Räikkönen's debut race in Australia in 2001, Häkkinen is believed to have recommended Kimi as his replacement at McLaren for the following season



▲ When asked by David Coulthard for his emotions on the Abu Dhabi podium in 2012, after his first win since his return to F1, Räikkönen's reply was simply: "Not much really. Last time you guys was giving me shit because I didn't really smile enough." Classic Kimi...





When Ferrari paid Kimi not to race in 2010 and 2011, one of the categories he decided to try was NASCAR. In 2011 he managed an event apiece in the Truck and Nationwide Xfinity series, both at Charlotte Motor Speedway. Kimi finished 15th in the truck race and 27th in the second-level stock cars



After his first pitstop at the 2008 Canadian GP Räikkönen was stationary at the red light at end of the pitlane, waiting to be allowed onto the circuit, when Lewis Hamilton ran into the back of his Ferrari. Kimi then calmly chose to point out the lights to Lewis...

▼
At the 2020 Eifel GP at the Nürburgring Räikkönen, fairly unceremoniously it must be said, finally overhauled Rubens Barrichello's record of 322 grand prix starts. He gave a short speech to his Alfa Romeo team in the paddock but then it was straight back to work for Kimi



▼
Still without a win after six races in 2006, Räikkönen was running second at Monaco when a wiring loom caught fire, a repeat of a practice problem. Disgruntled, Kimi stomped off and, instead of returning to the pits, went straight to his yacht moored in the harbour



▼
Kimi's reaction to a team radio message when leading the 2012 Abu Dhabi GP, about the gap to Fernando Alonso, is now part of F1 folklore. "Just leave me alone," said Kimi. "I know what to do." The t-shirt industry clapped its hands and Kimi is still more than happy to sign them



▲
Kimi's great start from fourth on the grid for the 2017 Singapore GP ended in disaster for Ferrari. Räikkönen tangled with Max Verstappen's Red Bull on the run to the first corner and careered into team-mate and title challenger Sebastian Vettel. All three had to retire...



When Kimi left F1 at the end of 2009 he signed with the Citroen Junior Team for the 2010 World Rally Championship. Apart from this unfortunate shunt in Finland, he acquitted himself well and formed his own team, Ice1 Racing, to compete in the 2011 season



Kimi has always had a very loyal, committed and global fan base, as these spectators at the 2014 Chinese GP demonstrated. This was due, probably in equal measures, to his unwillingness to conform to the norm of how an F1 driver should act, his longevity, and his undoubted talent



Räikkönen's 2018 US GP win at the Circuit of The Americas, his only victory during his second spell at Ferrari, meant he claimed another F1 record. The 113 races since his previous win in Australia in 2013 beat the previous mark of 99 races held by Riccardo Patrese



NIGEL ROEBUCK'S FORMULA ONE HEROES

NELSON PIQUET

PICTURES  **motorsport
IMAGES**

AFTER
WINNING
KARTING AND
FORMULA
VEE...

championships in his native Brazil, Nelson Piquet came to Europe in 1977, winning innumerable F3 races before making his F1 debut with Ensign at Hockenheim the following year. After further grands prix in a privately entered McLaren, there came an invitation to drive a factory Brabham-Alfa at the final race, Montréal. It was the start of a long love affair.

Piquet was always a maverick in F1, as also was Bernie Ecclestone's team: over the next seven seasons there were 13 victories, and twice Nelson won the world championship.

Rarely do you come across a relationship between team and driver like this one. For one thing, there was a fundamental empathy between Ecclestone and Piquet; for another, an almost telepathic working relationship developed between Nelson and technical director Gordon Murray. It went further than that, though: everyone in the team, including such as Charlie Whiting and Herbie Blash, genuinely adored their free spirit of a driver.

It was the ideal environment for one of Piquet's personality – and not one he could have found anywhere else. Like Kimi Räikkönen today, he had no interest in anything to do with F1 save driving. His attitude to PR was simple: he wouldn't do it. Happily, Brabham was never a team which paid much heed to PR, and Parmalat, the major sponsor, made no demands of Nelson, so it was a perfect fit.

The relationship between Ecclestone (left) and Piquet worked well until Piquet felt the Brabham boss began to take his loyalty to the team for granted



Brabham was the perfect team for most of Piquet's career because he was only interested in one part of F1: driving

"At one point," he told me, "Ron Dennis spoke to me about joining McLaren, and he mentioned so many days a year working for Marlboro and others...forget it, I lost interest. I won't spend my life talking to people who don't understand racing. Basically, I'm lazy. When I'm not at a track, I like to get back to my boat, and disappear. I swim and ski, watch a lot of TV, lie around, do nothing. That's the way I am – and when I turn up at a race, I feel fresh..."

Piquet took his first grand prix victory in 1980, his first championship the year after. At Las Vegas, the final race, he finished fifth, and though those points were enough to lift the title, I have rarely seen a more exhausted driver than Nelson that blazing day in the desert. His fitness was never on par with Alain Prost, or even a chain-smoking Keke Rosberg.

Two years later, in the beautiful BMW-powered Brabham BT52, Nelson won the championship again, but one aspect of life with Bernie's team increasingly gnawed at him. At the Österreiching in 1985 we talked about it, and it remains one of the most remarkable conversations I ever had with a racing driver. I had been watching at the Boschkurve, and as I passed a caravan near the paddock entrance, there was a knock on the window. I saw Nelson's face, half hidden behind a curtain. He beckoned me in.

Since the beginning of time, as the summer wears on, an F1 paddock becomes increasingly dominated by rumours about the

following season. Back then there was not the Masonic secrecy of today, but still folk kept their cards close to their chest. Not on this occasion. "Help me," Piquet said. "I don't know what to do next year."

"Sometimes," he went on, "I think about Pelé and Garrincha. They were superstars across the world – and they finished their playing days with nothing! Pelé had to go to the New York Cosmos when he was an old man in football terms, to make some money, so now he's OK, but otherwise... I tell you one thing. That's not going to happen to me."

I'll admit I was taken aback, for Piquet had been the mainstay of Brabham for so long that he was regarded as a fixture, in the manner of Jim Clark at Lotus. Clearly, though, he felt he had been taken for granted for too long.

"So many people have said, 'Oh, Piquet – he has simple tastes, loves to race, doesn't care about money'. Bah! I've been screwed for seven years. At first I didn't mind because I'd joined one of the great teams, and it was my big chance. I knew that very well. So did Bernie."

"Since then I've been world champion twice, stayed loyal to one team – and Prost is earning three times as much as I am. I don't know how you rate us, but for sure Alain isn't three times better!"

It didn't help also that for 1985 Ecclestone had accepted a pot of gold from Pirelli, which was all very well for him, but held fewer attractions for his drivers.

"Bernie's switch from Goodyear to Pirelli – without telling me beforehand – has had a big effect on my attitude to the team," Nelson said. "For one thing, the tyres are usually uncompetitive; for another, Pirelli totally rely on me – I've done the equivalent of

EE

**PROST IS
EARNING THREE
TIMES AS MUCH
AS I AM. I DON'T
KNOW HOW
YOU RATE US, BUT
FOR SURE ALAIN
ISN'T THREE
TIMES BETTER!**

NELSON PIQUET

99

75 grands prix in testing for them! Forget bloody PR, this is real work for a driver – and that's why I should be paid what I'm worth."

As his anger mounted, so he spoke faster and louder. Then he stopped abruptly, and was silent a moment or two. "If I stay with Brabham another year, people will think I'll never leave," he murmured. "Bernie thinks that now..."

All this being so, then, which alternative was causing Nelson so much soul-searching? "It's Williams," he said immediately.


Normally, a racing driver will chew on razor blades before discussing financial matters, but Nelson was never a man for inhibitions: "I'm getting \$1million from Bernie," he said, "and I asked for double – which is still a lot less than Prost is getting. He's offered me \$1.6m, plus a thousand dollars a championship point, and for sure he's thinking it will be just enough to keep me."

I asked about the Williams offer. "Three point three million dollars," Nelson replied, "plus *ten* thousand dollars a point!"

It said everything about his feelings for Brabham that Piquet still had misgivings about going elsewhere. "I don't want to leave, but... I don't want to finish up like Garrincha. I've told Frank I'm ready to sign – am I doing the right thing?" The decision, I said, was surely a simple one. He nodded.

Conversations like this invariably started with 'Off the record', but it was typical of Nelson that he should bare his soul, then say, as an afterthought, "No writing for now, OK? Not until it's settled."

So he signed with Williams, where he collected another world title in 1987 before moving to Lotus, then to Benetton, for whom he scored three more wins before retiring from F1 at the end of 1991. Brabham, following Nelson's departure, never won another race.

Piquet, it has seemed to me, is one of those drivers – like Jack Brabham, like Mika Häkkinen – curiously underrated in motor racing history. As Jack and Mika were multiple world champions, so too was Nelson, yet rarely do their names crop up in discussion of F1's all-time greats. Indisputably that is where they all belong. 

Two of Piquet's three world titles were achieved with Brabham, the second driving the BMW-powered, turbocharged BT52



VEL'S PARNELLI JONES VPJ-4

Formula 1 proved a step too far for a US superteam with massive plans



NOW THAT WAS A CAR

No. 104

WORDS
STUART COOLING
PICTURES
JAMES MANN



You could drive past 20555 Earl Street, Torrance without any inkling of the site's previous life. Once the hub of one of US racing's most dynamic and ambitious operations, it's now just another anonymous low-rise office complex in the greater Los Angeles urban sprawl.

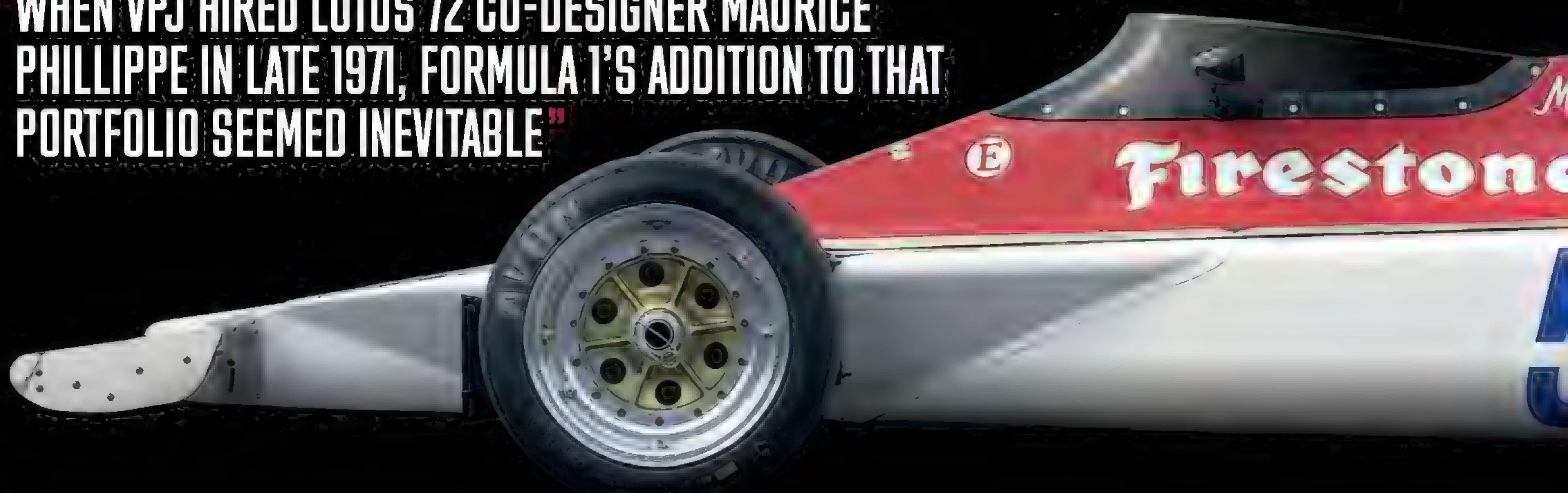
In the early 1970s Vel's Parnelli Jones Racing juggled successful IndyCar campaigns with Formula 5000, NHRA Top Fuel and Funny Car and USAC dirt racing, earning itself the somewhat unimaginative sobriquet of "the Superteam". When VPJ hired Lotus 72 co-designer Maurice Phillippe in late 1971, Formula 1's addition to that portfolio seemed inevitable.

Like many drivers who needed to conceal their racing activities from their families, Rufus Parnell Jones took on his thinly veiled pseudonym 'Parnelli' when he began to dabble in jalopy racing at the age of 17, below the legal minimum in his adopted home state of California. The Jones family had left their native Arkansas during the Great Depression, when Parnelli was two years old, and settled in Torrance, the hotbed of SoCal car culture. Jones developed into an astoundingly successful racer across a wide range of disciplines, from stock cars to open-wheelers to dirt buggies, to the extent that he became a household name and many a traffic cop's opening gambit to a speeding motorist: "Who do you think you are? Parnelli Jones?"

Jones titled his own autobiography *As A Matter Of Fact, I Am Parnelli Jones*. It was he who won the 1963 Indy 500 in controversial circumstances, at the expense of Jim Clark's Lotus, when officials broke their own rules and declined to black-flag Jones for an oil leak. Lotus didn't protest because its engine supplier, Ford, prudently recognised that to overturn such a popular victory would be a staggering PR failure. In 1967 Jones was paid the unprecedented sum of \$100,000 – in a suitcase, so the legend goes – to pilot Andy Granatelli's four-wheel-drive STP gas turbine car in the 500, a race he led for 171 laps before a bearing in the transmission let go.



"WHEN VPJ HIRED LOTUS 72 CO-DESIGNER MAURICE PHILLIPPE IN LATE 1971, FORMULA 1'S ADDITION TO THAT PORTFOLIO SEEMED INEVITABLE"



Wisely, perhaps, for this was a dangerous era, Jones forsook the IndyCar cockpit thereafter, continuing to race in other disciplines while building his successful tyre distribution business. Beginning with a single outlet in 1966 on Hawthorne Boulevard (now a Nissan dealership), Parnelli Jones Firestone dealers eventually spread across 14 states. Jones and his friend Vel Miletich, owner of a Ford dealership in Torrance, also diversified into automobile component distribution as well as founding Vel's Parnelli Jones Racing, with which enterprise the duo aimed to "kick ass".

This they duly did, in IndyCar and elsewhere. Al Unser won the 1970 and '71 Indy 500s and the USAC championship for VPJ, while team-mate Joe Leonard was USAC champion in '71, both driving Lola T150-based Colt chassis built up by the legendary George Bignotti. Leonard also won the title in 1972 aboard Maurice Phillippe's first Indycar, the VPJ-1, though this victory owed much to the unreliability of the fast-but-fragile new Eagle piloted by Bobby Unser.

The VPJ-1 was unveiled with eye-catching dihedral wings featuring integrated radiators. Phillippe's reasoning was that when the car was in yaw the wings would be presented to the airstream, and therefore more effective. But the principle was never thoroughly tested since the wings were removed very quickly when initial runs proved unpromising and Al Unser gave it the thumbs-down. The rising rate suspension geometry also proved problematic and difficult to tune, as it had on the Lotus 72, and the complicated rear suspension, which featured a camber-compensation system, had to be redesigned when a conventional rear wing generated more downforce than its structural parameters could handle. For the drivers the main issue was the twitchiness of the car, a necessary evil

VEL'S PARNELLI JONES VPJ-4

NOW
THAT
WAS
A
CAR

No.104



in Formula 1 but no virtue at all in high-speed oval racing where stability is king.

George Bignotti remains the most successful mechanic/engineer/crew chief in IndyCar history, joining VPJ after winning the Indy 500 with AJ Foyt and Graham Hill. He had much in common with Brabham's Ron Tauranac, in that engineering matters were concluded his way or the wrong way. Accordingly, he and Phillippe did not see eye to eye and it would generally fall to Bignotti to redesign elements of the cars along more conventional IndyCar lines when some of Phillippe's more outside-the-box ideas failed to fly. Bignotti took his leave in 1973 and, after the VPJ-2 and VPJ-3 failed to



please drivers Leonard, Unser and Mario Andretti, the team bought customer Eagle chassis instead.

Firestone had introduced the slick tyre to F1 in 1971, and by 1974, as the Cosworth DFV engine achieved virtual ubiquity, tyres had become key performance differentiators – and the subject of a brutal development war. An F1 campaign was a natural fit for VPJ, given its corporate alignment with Firestone, and would enable Phillippe to design a bespoke F1 car which Jones hoped could then be adapted to race in IndyCars. Firestone, initially, was more than happy to come on board as a major sponsor, alongside Viceroy cigarettes, and develop bespoke tyres. Andretti was the natural choice to drive, since his intermittent F1 experience encompassed putting a Lotus on pole for his grand prix debut and winning on his maiden appearance with Ferrari.

The VPJ-4 was shaped by Phillippe's desire to claw back some credit for authorship of the Lotus 72, since Colin Chapman had begun to airbrush him out of the car's development history after Phillippe's move stateside. It had much in common with the earlier car, one which had proved so competitive – after some initial teething problems – that Lotus itself struggled to conjure an adequate replacement. It's claimed that when the VPJ-4 arrived on the grid for the first time, at the penultimate round of the 1974 season, Chapman remarked to Lotus team manager Peter Warr that it represented a better follow-up to the 72 than Lotus's own, the troubled 76.

Andretti was less enthusiastic, later describing the VPJ-4 as "basically a three-year-old Lotus 72". Certainly the design cues were all present, from the extreme wedge nose – enabled by torsion bar front suspension – to the inboard brakes and hip-mounted radiators. It was certainly a bolder concept than

“MILETICH AND JONES DECIDED THE COST OF COMPETING IN F1 OUTWEIGHED THE REWARDS AND PULLED THE PLUG”

the car fielded by the other US superteam which made its first appearance at Mosport Park for the Canadian GP that year: Penske's Geoff Ferris-penned PC1, driven by Mark Donohue. Andretti qualified 16th and raced to seventh, on the cusp of scoring points, while Donohue started 24th and finished 12th.

Two weeks later, at the season finale at Watkins Glen, Andretti qualified third. His principal complaint about the car remained that the rising-rate suspension was too soft throughout most of its working range but here, at a bumpy track, that characteristic worked in his favour. On race day, though, the engine spluttered out on the grid and then developed a vapour lock in the fuel system. Andretti was disqualified for receiving a push start.

Disaster struck as Firestone withdrew from grand prix racing, taking vital funds as well as the promise of bespoke rubber. VPJ would continue to be a one-car entry in 1975 as the car was hastily redeveloped to suit Goodyear's tyres.

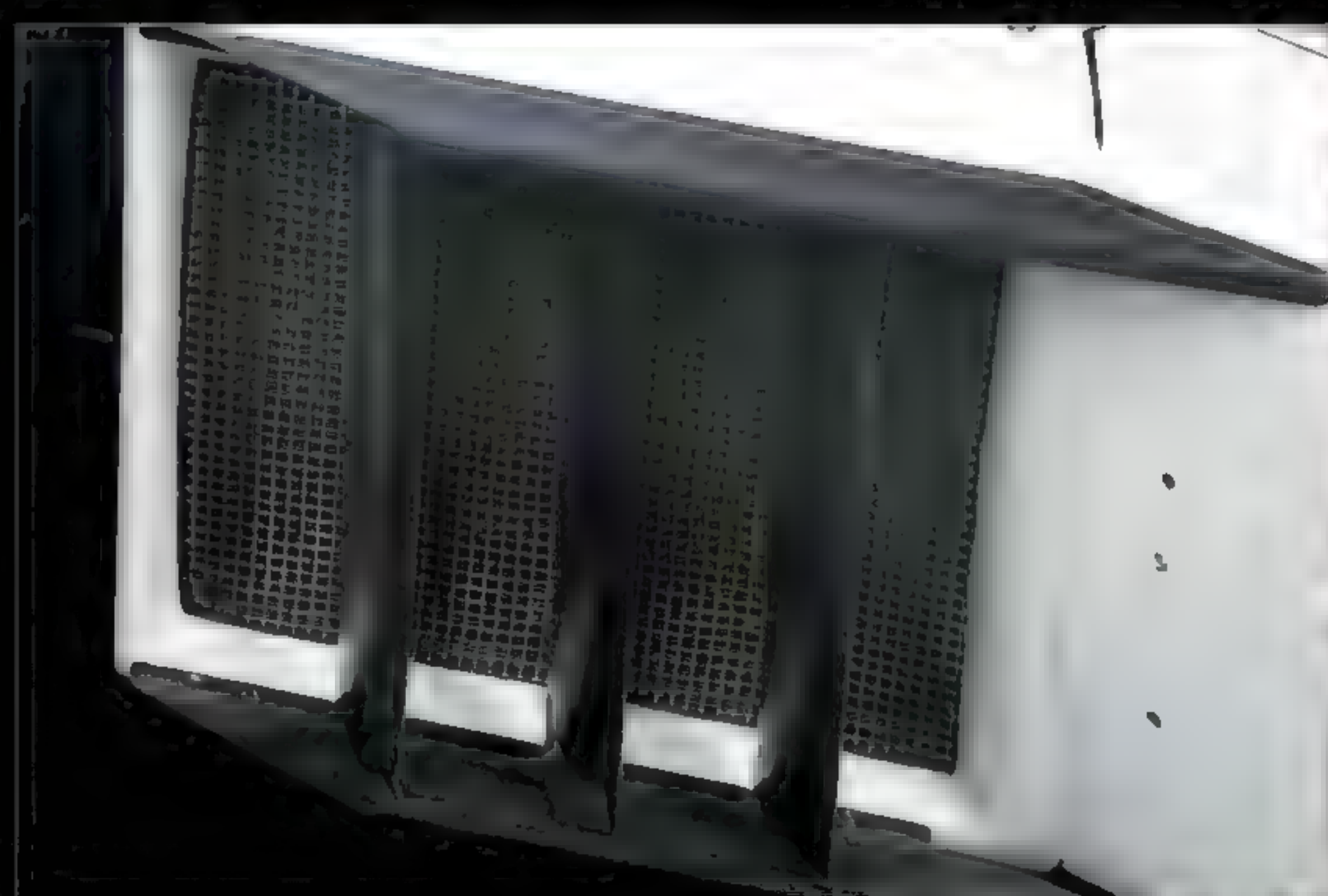
Lack of budget, as well as VPJ's commitment to racing across multiple categories, meant the F1 project was starved of the resources and focus that were essential prerequisites to success, even in this less technologically rarefied era. Andretti spent much of 1975 fighting in the midpack and suffering retirements brought on by component failures.

Still, there were high points. While the 1975 Spanish Grand



Prix is best remembered now for the tragic accident which underlined the Montjuic circuit's hopelessly inadequate safety facilities, Andretti qualified fourth and briefly led (albeit after turfing Niki Lauda into the barriers) before a rear track rod bailed from its mountings. In Sweden, despite a scary accident in practice when a front brake shaft sheared – reminiscent of that which claimed the life of Jochen Rindt in 1970 – Andretti raced the spare car to fourth place, challenging Clay Regazzoni's Ferrari throughout.

Phillippe had hoped to attend grands prix with the car, learn about its behaviour and debug it on the fly, but Jones required him to remain in California and spin the F1 design into an IndyCar, the VPJ-6. By mid-season Phillippe quit to return to the UK. Onward development of the VPJ-4 – along



VEL'S PARNELLI JONES VPJ-4

NOW
THAT
WAS
A
CAR
No.104

with Jones's many other projects, including a Baja dirt racer – would fall to another engineering recruit from across the pond, the ambitious young John Barnard.


Among the first tasks was to relocate the brakes. Since most cars ran outboard front brakes, tyre development was naturally following this trend, with constructions and compounds to suit the greater weight within the wheel as well as the heat-rejection characteristics. Barnard also dropped the rear torsion bars for conventional coil-over-shocks and redesigned the front and rear wings and the radiator ducting.

1976 began with Andretti retiring from Brazil in a Lotus, but he switched back to Parnelli for South Africa where he was sixth – a place behind John Watson's Penske. Watson would go on to win in Austria that year but it wasn't enough to persuade Roger Penske not to shutter his F1 operation. Likewise Miletich and Jones decided the cost of competing in F1 outweighed the rewards and pulled the plug – after round three.

Andretti was among the last to know, learning only when the journalist Chris Economaki approached him on the grid at Long Beach for an on-the-record comment. Mario later recalled being so discombobulated by the revelation that he nearly forgot to put the VPJ-4 into first gear.

At breakfast in the hotel the following day Andretti encountered a similarly downbeat Colin Chapman, whose new 77 had proved a disappointing bust in the hands of Bob Evans and Gunnar Nilsson that weekend. "I'll drive for you and we'll make the car better," Andretti told him.

He was as good as his word, honing the recalcitrant 77 into a winner by the end of the season – and then returning Lotus to world championship glory two years later. Vel's Parnelli Jones successfully turbocharged the Cosworth V8 for IndyCar use and the DFX engine, as it became known, became the de facto choice, powering Indy 500 winners for another decade. But Miletich and Jones never got to see the commercial rewards for their investment: rather than appoint VPJ as a distributor, Cosworth set up its own facility in Torrance.

It was this, rather than the demise of the F1 project, which was the beginning of the end for 'the Superteam'. Faced with diminishing sponsorship income and escalating costs, VPJ closed its IndyCar team at the end of 1978. 

RACE RECORD

Starts 16
Wins 0
Poles 0
Fastest laps 1
Podiums 0
Championship points 6

SPECIFICATION

Chassis Aluminium monocoque
Suspension Rocker arms with torsion bars (front and rear) and coil springs/dampers (rear, from 1975)
Engine 90-degree naturally aspirated V8
Engine capacity 2993cc
Power 510bhp @ 11,000 rpm
Gearbox Five-speed manual
Brakes Discs front and rear
Tyres Firestone (1974), Goodyear
Weight 578kg
Notable drivers Mario Andretti



SUBSCRIPTION OFFER

GIVE THE GIFT THEY CAN OPEN AGAIN AND AGAIN

TREAT THE F1 FAN IN YOUR LIFE TO THE WORLD'S
BEST-SELLING F1 MAGAZINE THIS CHRISTMAS



Save up to
66%



UK £5.99
NOVEMBER
2021



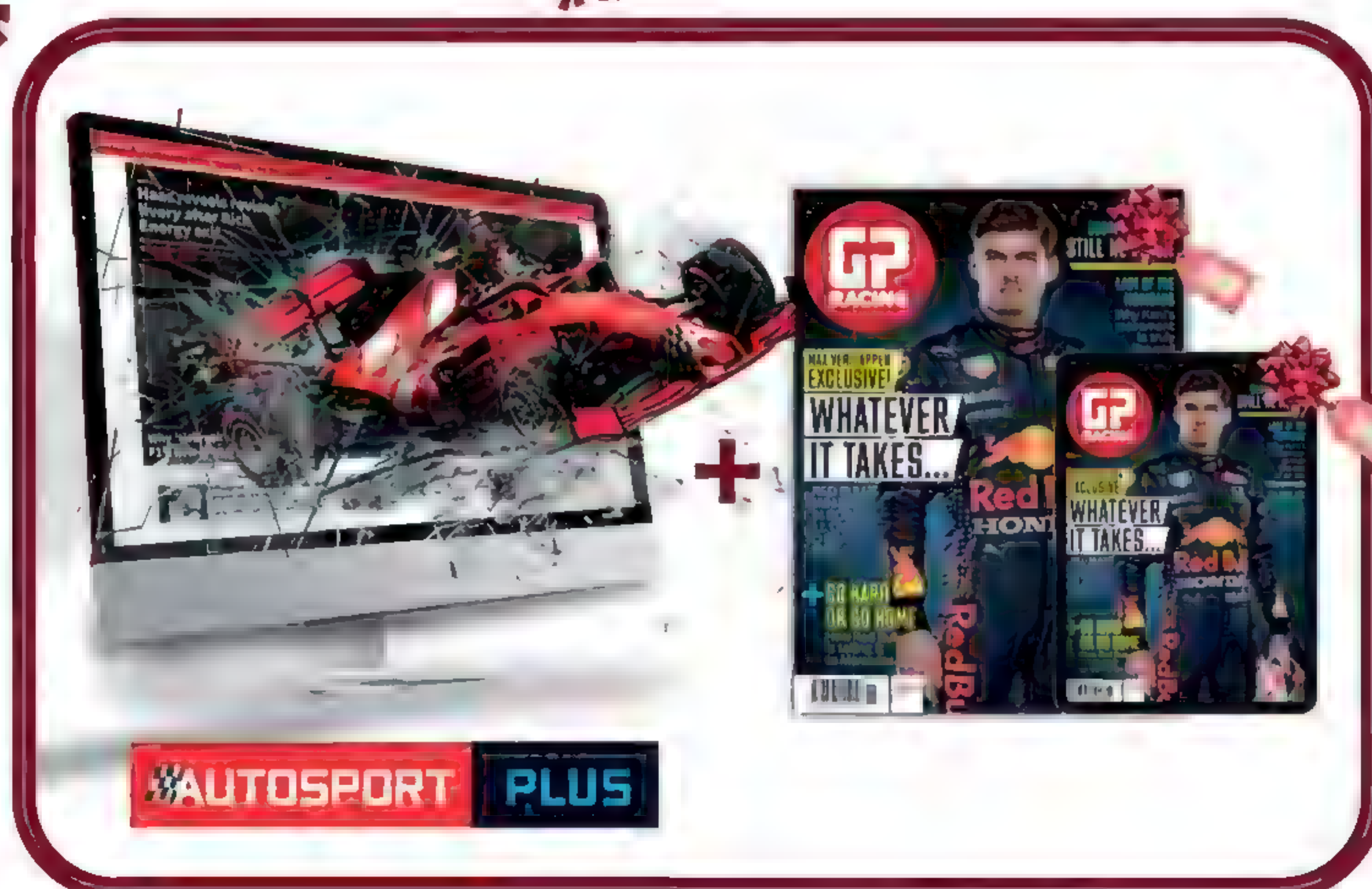


SUBSCRIPTION OFFER



WHAT MAKES GP RACING THE PERFECT GIFT THIS CHRISTMAS:

- DETAILED INSIGHT
- STUNNING IMAGERY
- EXCLUSIVE INTERVIEWS
- THE BEST F1 WRITERS
- FREE HOME DELIVERY
- SAVINGS OF UP TO 66%



ACCESS EVEN MORE ONLINE

We've made it even easier to read about Formula 1. Our print + digital bundle will include access to **Autosport Plus**, unlocking unlimited stories of their favourite motorsport series on [autosport.com](https://www.autosport.com).

The print + digital bundle also gives access to the digital magazine on all devices, so GP Racing can be enjoyed any-time, anywhere.

SUBSCRIBE ONLINE:

[WWW.AUTOSPORTMEDIA.COM/OFFER/GPNOV21](https://www.autosportmedia.com/offer/gpnov21)

Terms and conditions: Offer valid for UK subscriptions only and for the print + digital package only. You will need to select the start issue to be February 2022 for the subscription to begin with the first available issue after Christmas. You will be emailed instructions of how to gain access to your digital subscription. Savings are based on the standard UK cover price. Offer ends 31 December 2021.



FINISHING STRAIGHT

RACE DEBRIEF

F1 WORLD CHAMPIONSHIP ROUND 15

THE RUSSIAN GP
IN 3 KEY MOMENTS

1 "Blind faith" helps Lewis notch up his Hamil-ton

Lewis Hamilton secured his 100th grand prix victory in an extraordinary race at Sochi, passing the McLaren of long-time leader Lando Norris as conditions changed radically in the final laps. The grand prix had been intriguing enough anyway until rain imposed a dramatic coda, in effect rendering the race a mirror image of Saturday's qualifying session, where drying conditions abruptly changed the order in the final moments.

Few people would have bet the house on a Hamilton win based on his Saturday showing. Foul conditions had prompted the FIA to adjust the weekend schedule, moving the first F3 race to Friday evening and abandoning FP3. Valtteri Bottas and Max Verstappen already faced long slogs from the tail of the grid, owing to engine penalties, and gradually drying conditions opened the prospect of a mixed-up grid. But the crossover point to dry tyres didn't arrive until the clock was almost up in Q3, by which time Hamilton had nerfed his front wing against the pitwall on his way in for slicks. He then spun and failed to better the time he'd set on intermediates – good enough for fourth on the grid.

Lando Norris, Carlos Sainz and George Russell were the only other drivers on slicks at precisely the right time to capitalise on the slippery final sector becoming marginally less treacherous, and qualified 1-2-3. For a delighted Norris it was his first F1 pole position.

By the end of the first lap on Sunday, the auguries for a Hamilton win still weren't great. Sainz took advantage of the powerful tow into Turn 2 to slingshot into the lead while Hamilton was bottled up behind Norris and slipped to seventh behind Lance Stroll, Daniel Ricciardo and Fernando Alonso. Though Lewis made short work of Alonso, he then became stuck in a DRS train behind Russell, Stroll and Ricciardo as Sainz and Norris pulled a six-second gap on the chasing pack.

Norris was already shaping up to pass Sainz for the lead when Stroll stopped for hard tyres on lap 12 of 53 in a bid to undercut Russell. That triggered a rash of other pitstops as Sainz and Russell hurried to cover the Aston Martin. When Ricciardo had a slow stop on lap 22, Hamilton was free to extend his first stint, and he and Norris found the early graining on the medium tyres had abated.

Norris switched to the hard tyre on lap 28, two laps after Hamilton, and although the Mercedes cut



Hamilton's 100th win seemed highly unlikely until rain intervened in the closing stages of the race

PICTURES: MARK SUTTON, GLENN DUNBAR, ANDY HONE, STEVE ETHERINGTON

through traffic and onto the McLaren's tail, there it stayed until the rain arrived on lap 46. Both drivers rejected instructions to pit, but Mercedes had an advantage: it could pit Bottas for inters and lose nothing, since he was out of the points. McLaren couldn't do likewise with sixth-placed Ricciardo.

On his outlap Bottas was 8s faster than Norris and it was this, combined with the prediction of more intense rain to come, which prompted Mercedes to over-rule Hamilton and order him in with three laps to go – that and the 43s gap to third-placed Sergio Pérez. Emerging 25s behind Norris, Hamilton was initially unconvinced – but the rain duly intensified and Norris slithered off before stopping for intermediates with two laps to run.

"It was just blind faith at the end," said Hamilton later. "I can't take credit for that amazing decision."

2 Max minimises penalty damage

Red Bull approached race day at Sochi expecting fifth place at best for Max Verstappen, having made a strategic engine change which put him to the back of the grid. Figuring that Max would qualify third fastest at best on a track traditionally dominated by Mercedes, making him sixth once his grid penalty from Monza was applied, Honda introduced a raft of hybrid components as well as a new power unit to his pool.

A long but punchy first stint on hard tyres delivered Verstappen into the top six, but Fernando Alonso – running an even longer opening stint – overtook the Red Bull after its first pitstop and the prospect of a top-five finish ebbed away as Max experienced graining on his new mediums. But the rain transformed things and, by pitting the lap before Hamilton, Max was rewarded as the rain intensified, cutting through to second. "It was like a victory for us," said team principal Christian Horner.

3 Sainz hails 'strongest weekend in a Ferrari'

Second on the grid is the bogey spot at Sochi, given its place on the dirty side of the track and the potency of the tow to Turn 2, but Carlos Sainz recovered from a slow initial getaway to mug polesitter Lando Norris for the lead and stay there for the first 12 laps. The going got tougher when graining – and Lance Stroll's early stop – prompted Sainz to pit, miring him in a train which included cars running long first stints on hard rubber.

But Sainz was able to keep his hard tyres alive while setting a respectable pace, enough to advance to third again when others stopped ahead. He was going to be vulnerable to those running



Verstappen had good reason to smile after his race to second from the back of the grid

alternate strategies – Pérez, on newer medium tyres, overtook him just as the rain set in – but the change of conditions enabled Sainz to be an early adopter of intermediates and finish on the podium.

"I'm not going to lie, I'm proud of the weekend," he said. "Overall, I think it's been my strongest weekend in a Ferrari."

Sainz's third podium with Ferrari was reward for his best weekend in the red of the Scuderia



RESULTS ROUND 15

SOCHI / 26.9.21 / 53 LAPS



1st	Lewis Hamilton Mercedes	1h30m41.001s
2nd	Max Verstappen Red Bull	+53.271s
3rd	Carlos Sainz Ferrari	+62.475s
4th	Daniel Ricciardo McLaren	+65.607s
5th	Valtteri Bottas Mercedes	+67.533s
6th	Fernando Alonso Alpine	+81.321s
7th	Lando Norris McLaren	+87.224s
8th	Kimi Räikkönen Alfa Romeo	+88.955s
9th	Sergio Pérez Red Bull	+90.076s
10th	George Russell Williams	+100.551s
11th	Lance Stroll Aston Martin	+116.198s*
12th	Sebastian Vettel Aston Martin	+1 lap
13th	Pierre Gasly AlphaTauri	+1 lap
14th	Esteban Ocon Alpine	+1 lap
15th	Charles Leclerc Ferrari	+1 lap
16th	Antonio Giovinazzi Alfa Romeo	+1 lap
17th	Yuki Tsunoda AlphaTauri	+1 lap
18th	Nikita Mazepin Haas	+2 laps
19th	Nicholas Latifi Williams	+6 laps/damage

Retirements

Mick Schumacher Haas 32 laps - hydraulics

Fastest lap

Lando Norris 1m37.423s on lap 39

TYRE COMPOUNDS USED



CLIMATE

Cloudy
dry/wet

AIR TEMP

19°C

TRACK TEMP

22°C

DRIVERS' STANDINGS

1 Hamilton 246.5pts	12 Vettel 35pts
2 Verstappen 244.5pts	13 Stroll 24pts
3 Bottas 151pts	14 Tsunoda 18pts
4 Norris 139pts	15 Russell 16pts
5 Pérez 120pts	16 Latifi 7pts
6 Sainz 112.5pts	17 Räikkönen 6pts
7 Leclerc 104pts	18 Giovinazzi 1pt
8 Ricciardo 95pts	19 Schumacher 0pts
9 Gasly 66pts	20 Kubica 0pts
10 Alonso 58pts	21 Mazepin 0pts
11 Ocon 45pts	





FINISHING STRAIGHT

RACE DEBRIEF

F1 WORLD CHAMPIONSHIP ROUND 16

THE TURKISH GP IN 3 KEY MOMENTS



1 Red Bull minimises losses on Mercedes' day

Valtteri Bottas rightly hailed his victory from pole position in Turkey as "one of the best races I've ever had", but it wasn't enough to stop Red Bull's Max Verstappen reclaiming the lead of the world championship. While Bottas led imperiously throughout, apart from a brief period after his sole pitstop, team-mate and title contender Lewis Hamilton had a more eventful run to fifth.

A strategic engine change, adding another internal combustion element to the pool for the title run-in, consigned fastest-in-qualifying Hamilton to 11th on the grid. He had the pace to overtake on the wet and slippery Istanbul track, rising to ninth on the opening lap and then slicing through the field quickly after spending eight laps bottled up behind Yuki Tsunoda's AlphaTauri, but a late call to pit for fresh intermediates dropped him from a potential third place to fifth at the flag. Second place, albeit 14s down on Bottas, was enough for Verstappen to move ahead in the points once more, with team-mate Sergio Pérez joining him on the podium.

As at Sochi, Hamilton obeyed the Mercedes

team's instruction to pit only after challenging the wisdom of the call, but this time he lost out as a result – or did he? Only one other driver, Alpine's Esteban Ocon, managed to make it to the flag without stopping on a day when conditions were never right to switch to slick tyres.

Damp conditions dictated intermediates at the start, and intermittent drizzle kept the track far enough away from the crossover point to make the race a question of tyre management on this occasionally unpredictable member of Pirelli's family. When Aston Martin dared to be different and put Sebastian Vettel on medium slicks mid-race, he barely managed to keep his car on the asphalt for a lap before calling in for a fresh set of inters.

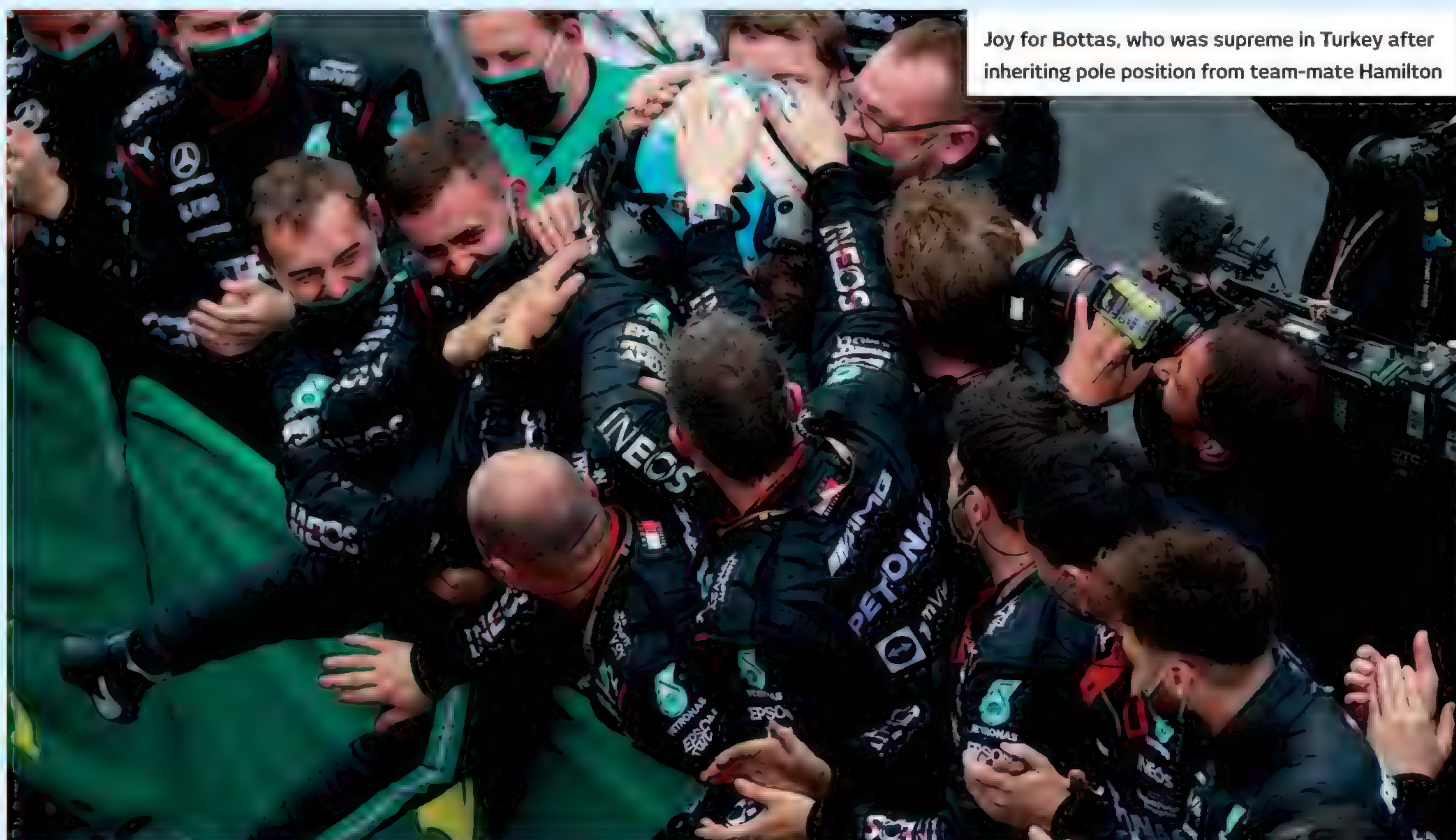
The need to extend the life of the inters – in anticipation of drier conditions which never arrived – kept the order up front static in the opening phase of the race as Bottas eased away from Verstappen. By mid-distance, as the treads on the inters were wearing down, teams were facing a critical decision: the safe choice of fresh inters,

or the risk of leaving drivers out as their first sets reached unexplored levels of wear. After all, Hamilton won here in 2020 after doing most of the race on one set of inters...

Red Bull brought Max in at the end of lap 36 and Mercedes responded with Bottas a lap later, enabling Ferrari's Charles Leclerc – clearly set on a no-stop run to the flag – to briefly take the lead. Pérez, pressured by Hamilton, also pitted. But Hamilton was adamant that his own tyres were OK.

When Hamilton first dug his heels in, his logic was impeccable: he was just three seconds behind Verstappen and lapping at a similar pace. If conditions changed over the remaining laps, dictating a change to slicks, he might have been in with a chance of winning.

But Leclerc's dramatic fall-off in tyre performance prompted Mercedes to over-rule Hamilton. The potential downsides were now too big – the lesser of two evils was to pit (lap 50) and come out ahead of sixth-placed Pierre Gasly rather than behind him.



Joy for Bottas, who was supreme in Turkey after inheriting pole position from team-mate Hamilton

PICTURES: STEVEN TEE; CHARLES COATES; MARK SUTTON; GLENN DUNBAR; STEVE ETHE-RINGTON



Leclerc's stop put him out of contention, but driver and team admitted it was the right call

"In hindsight, we should have pitted 10 laps earlier and fought it out on track and probably finished third or fourth," said team boss Toto Wolff. "But there was much more to gain from the other more dynamic choice."

2 No recriminations at Ferrari over Leclerc call

Neither Charles Leclerc nor Ferrari expressed any regrets over the failure of their audacious attempt to snatch victory in the Turkish Grand Prix.

The relatively conservative pace of the leading duo in the opening stint meant Leclerc was only eight seconds behind when Verstappen and Bottas made their pitstops, enabling him to take the lead. At the end of Bottas's out-lap Leclerc was almost seven seconds ahead, which would have been even greater had he not slithered off at Turn 12.

Initially Leclerc was able to maintain the gap and he began to discuss the possibility of staying out. This was perfectly legal since the race had been declared wet, removing the requirement to use two different dry-weather tyre compounds.

Ultimately Leclerc's tyres lost performance and he fell behind Bottas, then he pitted for fresh inters and dropped to third, which he lost to Pérez when the new rubber went through a graining phase.

"For the first five/six laps we were actually more

or less in line with the pace," Leclerc said. "For me it was clear that it was not just rolling the dice. I was quick and we were all confident with that choice."

"As Charles said, at the time when we stayed out, the performance was okay," said team boss Mattia Binotto. "But then the track changed, it was drier, and we had to come in."

3 Points for Gasly despite penalty

Pierre Gasly raced to sixth despite incurring a five-second penalty for contact at the first corner. Starting from fifth, Gasly found himself 'sandwiched' at Turn 1 with Pérez's Red Bull on the inside and Fernando Alonso on the outside. His front-right wheel clipped Alonso's left-rear, tipping the Alpine into a spin.

The penalty seemed harsh given that no sanction was imposed for a similar contact between Lewis Hamilton and Max Verstappen in Imola. But FIA race director Michael Masi insisted the circumstances were different in that Gasly was "wholly or predominantly" to blame.

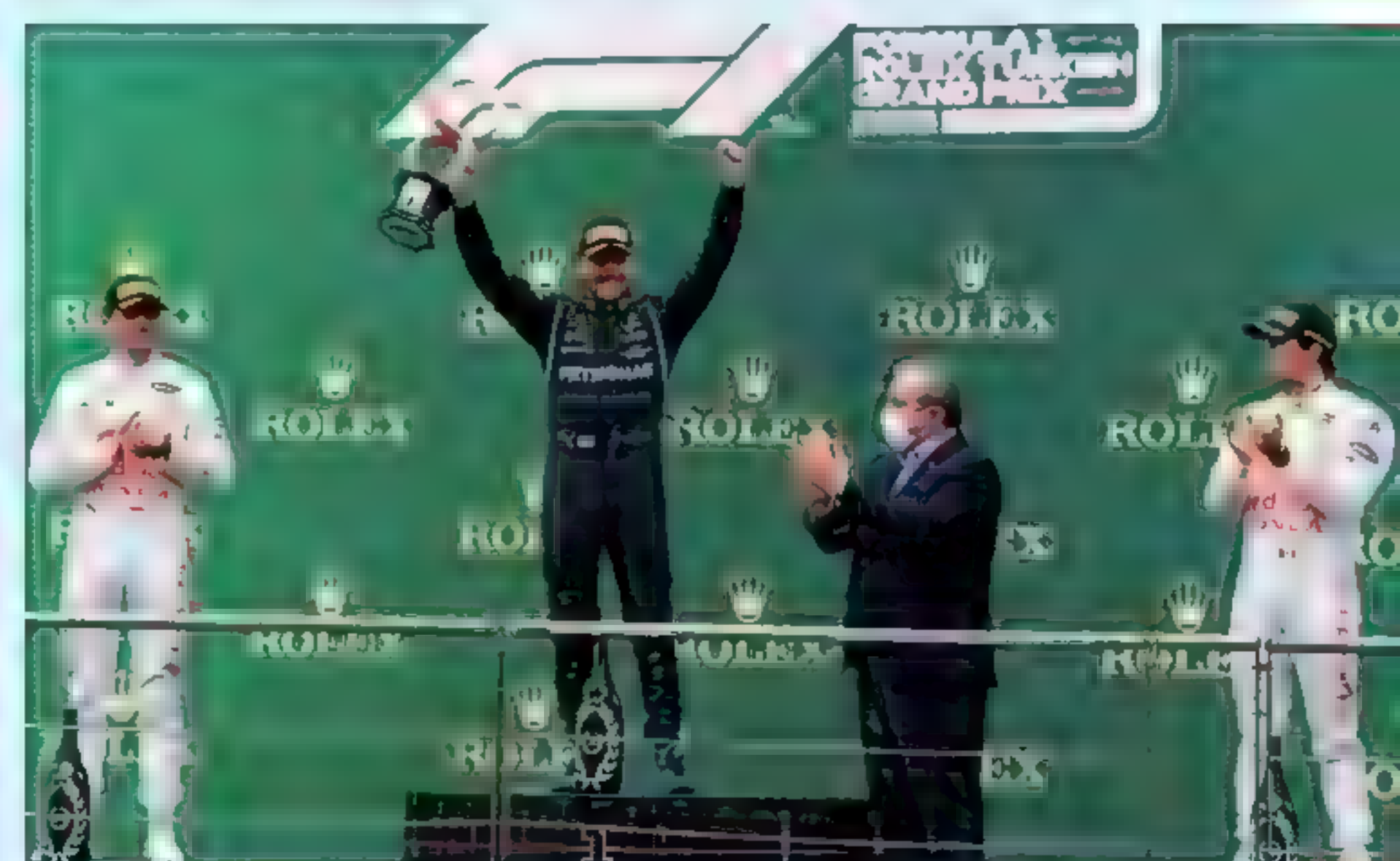
"For ease of interpretation, let's call it, if someone is wholly to blame on lap one, it will result in a penalty," he said. "If it takes two to tango and it is on lap one it would likely not result in anything."

Gasly recovered from the penalty handed out for his Turn 1 clash with Alonso to finish sixth



RESULTS ROUND 16

ISTANBUL PARK / 10.10.21 / 58 LAPS



1st	Valtteri Bottas Mercedes	1h31m04.103s
2nd	Max Verstappen Red Bull	+14.584s
3rd	Sergio Pérez Red Bull	+33.471s
4th	Charles Leclerc Ferrari	+37.814s
5th	Lewis Hamilton Mercedes	+41.812s
6th	Pierre Gasly AlphaTauri	+44.292s
7th	Lando Norris McLaren	+47.213s
8th	Carlos Sainz Ferrari	+51.526s
9th	Lance Stroll Aston Martin	+82.018s
10th	Esteban Ocon Alpine	+1 lap
11th	Antonio Giovinazzi Alfa Romeo	+1 lap
12th	Kimi Räikkönen Alfa Romeo	+1 lap
13th	Daniel Ricciardo McLaren	+1 lap
14th	Yuki Tsunoda AlphaTauri	+1 lap
15th	George Russell Williams	+1 lap
16th	Fernando Alonso Alpine	+1 lap
17th	Nicholas Latifi Williams	+1 lap
18th	Sebastian Vettel Aston Martin	+1 lap
19th	Mick Schumacher Haas	+2 laps
20th	Nikita Mazepin Haas	+2 laps

Retirements: None

Fastest lap

Valtteri Bottas 1m30.432s on lap 58

TYRE COMPOUNDS USED



Hard (C2)



Medium (C3)



Soft (C4)



Inter



Wet

CLIMATE

Wet/damp

AIR TEMP

17°C

TRACK TEMP

19°C

DRIVERS' STANDINGS

1 Verstappen 262.5pts	12 Vettel 35pts
2 Hamilton 256.5pts	13 Stroll 26pts
3 Bottas 177pts	14 Tsunoda 18pts
4 Norris 145pts	15 Russell 16pts
5 Pérez 135pts	16 Latifi 7pts
6 Sainz 116.5pts	17 Räikkönen 6pts
7 Leclerc 116pts	18 Giovinazzi 1pt
8 Ricciardo 95pts	19 Schumacher 0pts
9 Gasly 74pts	20 Kubica 0pts
10 Alonso 58pts	21 Mazepin 0pts
11 Ocon 46pts	



motorsport
STATS

22 RACES FOR 2022

While Max Verstappen and Lewis Hamilton are battling to the wire for championship victory in Formula 1, we're already looking ahead to what's in store for 2022.

With international travel back on the cards and circuits welcoming fans from across the globe back into their grandstands, we're getting you ready for a huge year of racing.

As millions of racing fans look to get back to their first race in years, and the action on track poised to be completely shaken up, here are our top 22 picks for races you should be looking at to get you back on track in 2022.

Austria

Dutch fans sent into raptures at party central of the racing calendar.

Canada

Canadian fans will flock to bustling Montreal for return of racing.



Spain

Varied circuit proves challenge for world's greatest drivers.

Miami

The Magic City is poised to host lively maiden race around Hard Rock Stadium.

Mexico

Celebrate Día de los Muertos with traditional on-circuit festival parade before intense racing.

Brazil

Charismatic Interlagos is always a racing highlight of the year.



BOOK 2022 SEASON TICKETS WITH  **motorsport TICKETS**

Britain

Spiritual home of Formula 1 pulls in record numbers from around the globe.

Belgium

Unpredictable Spa renowned as one of the world's most iconic circuits.

Russia

Final drive around Sochi Winter Olympic Park before moving to St. Petersburg in 2023.

Hungary

Iconic Hungaroring provides action just outside vibrant Budapest.

Bahrain

Desert circuit has become must-see race for insane duels on track.

Monaco

Glamorous Monte Carlo set to burst back into life with taller capacity crowds.

China

Tricky Shanghai circuit just a stone's throw from China's largest city.

Italy

Temple of Speed is home to passionate tifosi and has produced four different constructors' champions in four years.

Singapore

F1's original night race provides finest entertainment on and off track.

Azerbaijan

Bonkers Baku has provided box office drama at every race since its addition to F1.

Abu Dhabi

Fireworks expected at season finale in the luxury capital city.

Saudi Arabia

Fastest circuit on calendar set to host second race along the Red Sea.

Australia

Racing will finally return to dedicated fan base at altered Albert Park.

Japan

Crazy Suzuka delights Japanese fans and drivers as one of the great tracks in the sport.

To be the first to know when tickets for 2022 tickets go on sale, scan the QR code to join our mailing list. We'll send you on-sale notifications, offers, competitions and newsletters to put you in pole position for getting to races next year.

NOW ON-SALE - Austrian Grand Prix | Belgian Grand Prix | Monaco Grand Prix

motorsporttickets.com/2022

Scan
your phone
camera here





FINISHING STRAIGHT

RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 17

UNITED STATES GP

22-24 October 2021
Circuit of The Americas

PICTURES: STEVEN TEE; MARK SUTTON ILLUSTRATIONS: ALAN ELDREDGE



RACE DATA

Venue Circuit of The Americas
First GP 2012
Number of laps 56
Circuit length 3.425 miles
Race distance 191.633 miles
Lap record 1m36.169s
Charles Leclerc (2019)
F1 races held 8
Winners from pole 4
Pirelli compounds C2, C3, C4

CAR PERFORMANCE

Downforce level Medium
Cooling requirement Medium
Full throttle 63%
Top speed 205mph
Average speed 121mph

TIMETABLE (UK TIME)

Friday 22 October
Practice 1 17:30-18:30
Practice 2 21:00-22:00
Saturday 23 October
Practice 3 19:00-20:00
Qualifying 22:00-23:00
Sunday 24 October
Race 20:00
Live coverage Sky Sports F1
Highlights Channel 4

THE MAIN EVENT

Formula 1 struggled for decades to gain a foothold in the USA but, after many false starts, it has found a worthy home in Texas, at the Circuit of The Americas. A favourite among F1 personnel thanks to the laid-back vibe of nearby state capital Austin, the reborn US GP has also succeeded in building an audience – despite the absence of an American driver on the grid in recent years.

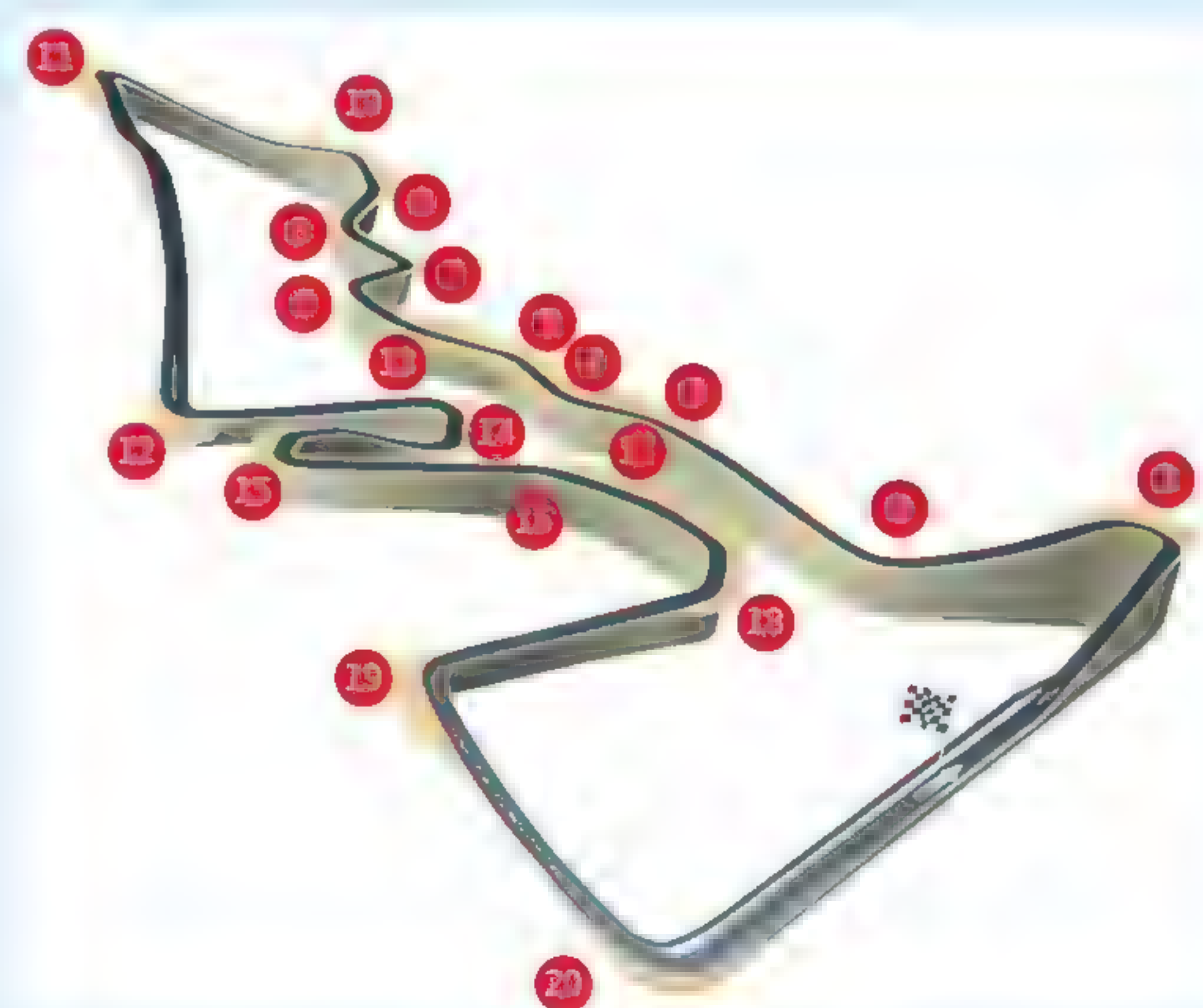
COTA hosted its first grand prix in 2012. The layout is for the most part fast and flowing, a test of commitment and downforce, with a few technical areas which require finesse. Its signature feature is the drag uphill to Turn 1, a hairpin which can be tackled in a number of different ways, which encourages drivers to have a go under braking.

2019 RACE RECAP

Mercedes had already secured the constructors' title before the F1 circus arrived in Austin and it was a two-horse race for the drivers' title, too, although Valtteri Bottas was 74 points behind team-mate Lewis Hamilton and needed a miracle to overhaul him. Bottas did everything right, qualifying on pole, while brake issues caused Lewis to make unusually heavy weather of Q3 and line up fifth.

On race day Bottas took a nudge from Max Verstappen at Turn 1 but survived it lead to much of the race, then catch and pass Hamilton after Mercedes put its drivers on alternate strategies. Having passed both Ferraris and Max's wounded Red Bull, Hamilton made Bottas fight for the win but settled for second and his sixth world title.

KEY CORNER: TURN 9 After sweeping through the high-speed Esses, drivers face this technical section where a sweeping right-hander gives way to a blind-entry left turn. Get it wrong and you're vulnerable at the Turn 11 hairpin.



THE WINNERS HERE...



2019
Valtteri Bottas
Mercedes



2018
Kimi Räikkönen
Ferrari



2017
Lewis Hamilton
Mercedes



2016
Lewis Hamilton
Mercedes



2015
Lewis Hamilton
Mercedes



FINISHING STRAIGHT

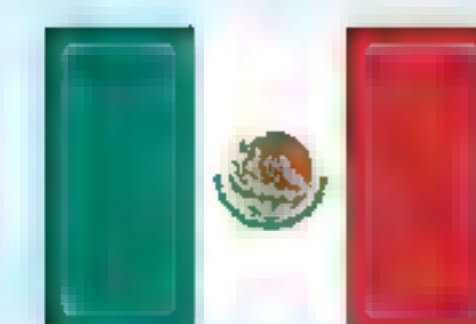
RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 18

MEXICO CITY GP

5-7 November 2021

Autódromo Hermanos Rodríguez



RACE DATA

Venue Autódromo Hermanos Rodríguez**First GP** 1963**Number of laps** 71**Circuit length** 2.674 miles**Race distance** 189.88 miles**Lap record** 1m18.741s

Valtteri Bottas (2018)

F1 races held 20**Winners from pole** 9**Pirelli compounds** C2,C3,C4

THE MAIN EVENT

Renamed the Mexico City Grand Prix for byzantine reasons involving local politics and whoever ends up paying the tab for running the event, the F1 race held at the Autódromo Hermanos Rodríguez has been a sell-out ever since it returned to the calendar in 2015. That's thanks to the Sergio Pérez, who must view this year as his greatest chance of a good result on home ground. Not that Red Bull will be inclined to favour him over Max Verstappen, so close is the battle at the top of the drivers' championship...

Mexico City's altitude leaves power units gasping but causes less drag, so the cars can run relatively high wing profiles and still reach high top speeds – an essential performance facet on this course's main straight.

2019 RACE RECAP

Lewis Hamilton notched up his 10th victory of the season despite qualifying in fourth place. Max Verstappen was fastest in qualifying but lost three grid positions for failing to observe a yellow flag when Valtteri Bottas hit the wall. Hamilton and Verstappen touched on the opening lap and both lost positions but, while Lewis managed to make a daring one-stop strategy work to recover and win the race, Verstappen picked up a puncture while making an aggressive move on Bottas.

Charles Leclerc and Sebastian Vettel ran 1-2 for Ferrari but the Italian team was undone by sticking to its strategy, and Hamilton claimed the lead when Leclerc made his second stop.

KEY CORNER: TURN 4 Less heralded than Turns 1-2-3 as an overtaking spot, the left-hander at Turn 4 is an important action area as emotions are often running high, depending on who has got the upper hand through the corners before...



CAR PERFORMANCE

Downforce level High**Cooling requirement** High**Full throttle** 47%**Top speed** 227mph**Average speed** 115mph

TIMETABLE (UK TIME)

Friday 5 November**Practice 1** 17:30-18:30**Practice 2** 21:00-22:00**Saturday** 6 November**Practice 3** 17:00-18:00**Qualifying** 20:00-21:00**Sunday** 7 November**Race** 19:00**Live coverage** Sky Sports F1**Highlights** Channel 4

THE WINNERS HERE...



2019

Lewis
Hamilton
Mercedes

2018

Max
Verstappen
Red Bull

2017

Max
Verstappen
Red Bull

2016

Lewis
Hamilton
Mercedes

2015

Nico
Rosberg
Mercedes

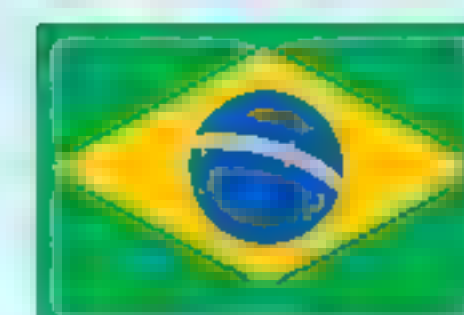


FINISHING STRAIGHT

RACE PREVIEW

F1 WORLD CHAMPIONSHIP ROUND 19

SÃO PAULO GP

12-14 November 2021
Autódromo José Carlos Pace

PICTURE: ZAK MAUGER ILLUSTRATIONS: ALAN ELDRIIDGE

THE MAIN EVENT

It's nearly 50 years since Interlagos hosted its first F1 race, the 1972 non-championship Brazilian GP won by the late Carlos Reutemann in a Brabham (Red Bull 'driver advisor' Helmut Marko was fourth in a BRM). Then just short of five miles long, the circuit has changed much in the interim and survived a number of challenges from other tracks for the privilege of hosting the country's race, which will be known as the São Paulo GP for the next five years.

Despite frequent resurfacing, this is a bumpy track which presents a major physical challenge to drivers. In combination with the bumps, the anticlockwise layout and relentless nature of the corners makes this a physically fatiguing event. The weather can be unpredictable, too, though that never puts off the passionate local crowd.

2019 RACE RECAP

Max Verstappen won from pole position in an eventful encounter which ended with Lewis Hamilton third on the road, but subsequently penalised for a clumsy late-race challenge on Verstappen's Red Bull team-mate Alex Albon. While it was a bad day for Mercedes – Valtteri Bottas retired with a hydraulics failure – it was worse for Ferrari as Charles Leclerc and Sebastian Vettel took each other out while disputing fourth place.

While a no-doubt colourful debrief unfolded in the Ferrari motorhome, Pierre Gasly took second place for Toro Rosso while Carlos Sainz inherited third (via Hamilton's penalty) to claim McLaren's first podium finish since 2014.

KEY CORNER: TURN 12 Marginally less challenging to nail in an F1 car than it is to pronounce correctly, Junção is a fourth-gear left-hander made more significant for being the gateway to the long straight which follows.



RACE DATA

Venue Autódromo

José Carlos Pace

First GP 1973**Laps** 71**Circuit length** 2.677 miles**Race distance** 190.082 miles**Lap record** 1m10.540s

Valtteri Bottas (2018)

F1 races held 37**Winners from pole** 16**Pirelli compounds** C2, C3, C4

CAR PERFORMANCE

Downforce level Medium**Cooling requirement** Medium**Full throttle** 60%**Top speed** 202mph**Average speed** 131mph

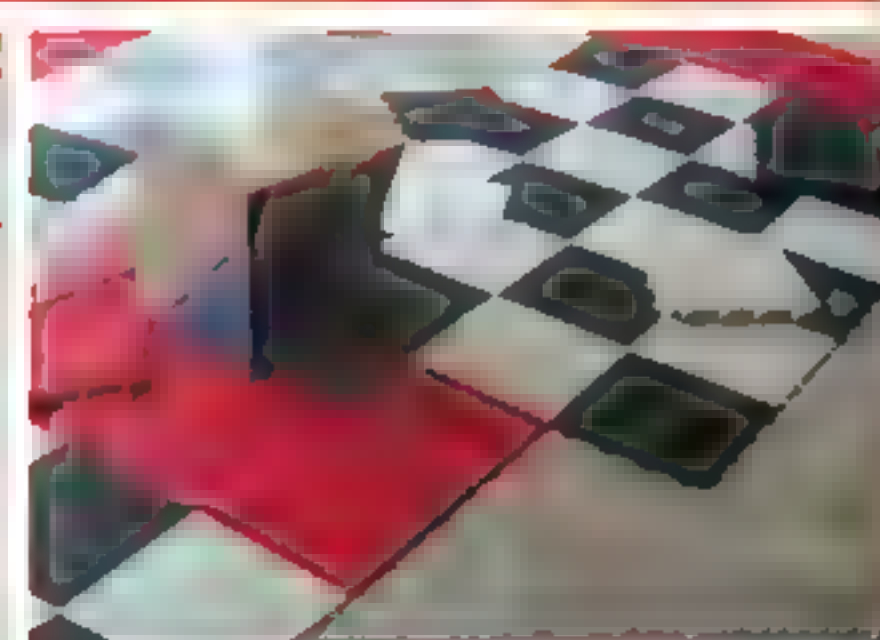
TIMETABLE (UK TIME)

Friday 12 November**Practice 1** 15:30-16:30**Qualifying** 19:00-20:00**Saturday** 13 November**Practice 2** 15:00-16:00**Sprint Race** 19:30-20:00**Sunday** 14 November**Race** 17:00**Live coverage** Sky Sports F1**Highlights** Channel 4

THE WINNERS HERE

2019
Max
Verstappen
Red Bull2018
Lewis
Hamilton
Mercedes2017
Sebastian
Vettel
Ferrari2016
Lewis
Hamilton
Mercedes2015
Nico
Rosberg
Mercedes

Turn your garage into a showroom



Robust
interlocking
floor tiles
Easy to fit
No messy
adhesives
Choice of 11
attractive
colours



DYNOTILE

Call 01676 523386
www.dynotile.co.uk

P1simulator.com



Formula Simulator Cars and Show Cars For Sale

www.p1simulator.com

UNIQUE OPPORTUNITY Fully Equipped Race Studio Available To Rent

This purpose built Race Studio is equipped with two Simulator Rooms one fitted with a Pro-Sim and the other with a full Tub Cranfield Sim. Both Sims have all FIA Tracks and Car Models.

There is also a fully equipped gym, kitchen, bathroom, shower and relaxation area with 50 inch television, 5 Car Parking Spaces.

A fantastic opportunity for Driver Training.

Situated just North of London between the M25 and M1.



Phone 07810 308 524



**Urban
Jack**

**IBEAUTY
AWARDS
LONDON 2019**
Highly
Commended

Award Winning Tattoo Moisturiser

One of the major issues with tattoos is aftercare. Tattoos need ongoing maintenance to ensure they maintain their radiance and to protect them from fading in the sun - colours such as red are especially prone to fading.

This Dual Action Tattoo Moisturiser absorbs quickly and deeply allowing the tattoo and the skin around it to enjoy a sense of calm while injecting a boost of nourishment. Perfect for freshly inked tattoos and for the maintenance and protection of existing skin art.

Available online at urbanjack.com





F1 UPGRADES

Enhance the F1 experience with the latest must-have products

RONNIE PETERSON 'SUPERSWEDE' 1:18

Price \$99.99

automodello.com

Automodello specialises in hand-crafted limited-edition miniatures and its new 'Moments in Motorsports' series, created by the Virginia-based History in Miniature company, will present a range of F1 memorabilia in 1:18 and 1:12 scale. The first is a figurine of Ronnie Peterson, the spectacular 1970s F1 driver who died tragically young after an accident at the start of the 1978 Italian Grand

Prix, where his Lotus team-mate Mario Andretti won the drivers' title.

Each 1:18-scale model is hand-made in pewter by sculptor Juan Torres and painted by artist Chris Janke. Production is limited to 150 and each model will be numbered and signed by both artists (the Lotus car shown in the images is not included). A 1:12-scale figure of Jim Clark is due for release before the end of the year.



F1 MOBILE RACING 2021

Price Free (includes in-app purchases)

[Google Play](https://play.google.com/store/apps/details?id=com.codemasters.f1mobile), [Apple App Store](https://apps.apple.com/gb/app/f1-mobile-racing-2021/id1444688183)

Much like a Formula 1 car, the mobile version of Codemasters' official F1 game has received several upgrades and updates since its launch in 2018. This latest version now includes the cars, drivers and tracks for 2021 as well as featuring tweaks to the graphics engine and game mechanics. The game itself follows a familiar pattern: players race against each other or against AI opponents (there are single-player and multi-player modes), and winning races earns rewards in the form of car upgrades.

You can choose between touch or tilt controls or a combination of the two, and there are various 'driver assists' such as an indicator of the right racing line and braking points.

Codemasters promises a career mode in a future update. In the console and PC versions of the game this enables players to create their own drivers and take them through Formula 2 or jump straight into F1, shaping long-term technical development and even engaging in contract negotiations.

RESERVOIR KANISTER

Price £3,750-£3,950

reservoir-watch.com

The new Reservoir Kanister watch collection draws its inspiration from the speedometer of the iconic Porsche 356 Speedster, with a white hand on a black dial which is illuminated by pastel green minute indices and a redline area. A 'jumping window' indicates the hour while a further needle shows the state of charge. It's a significant departure from the traditional three-hands watch and intended to mimic the sweep of a rev counter, the ticking over of the mileometer, and the

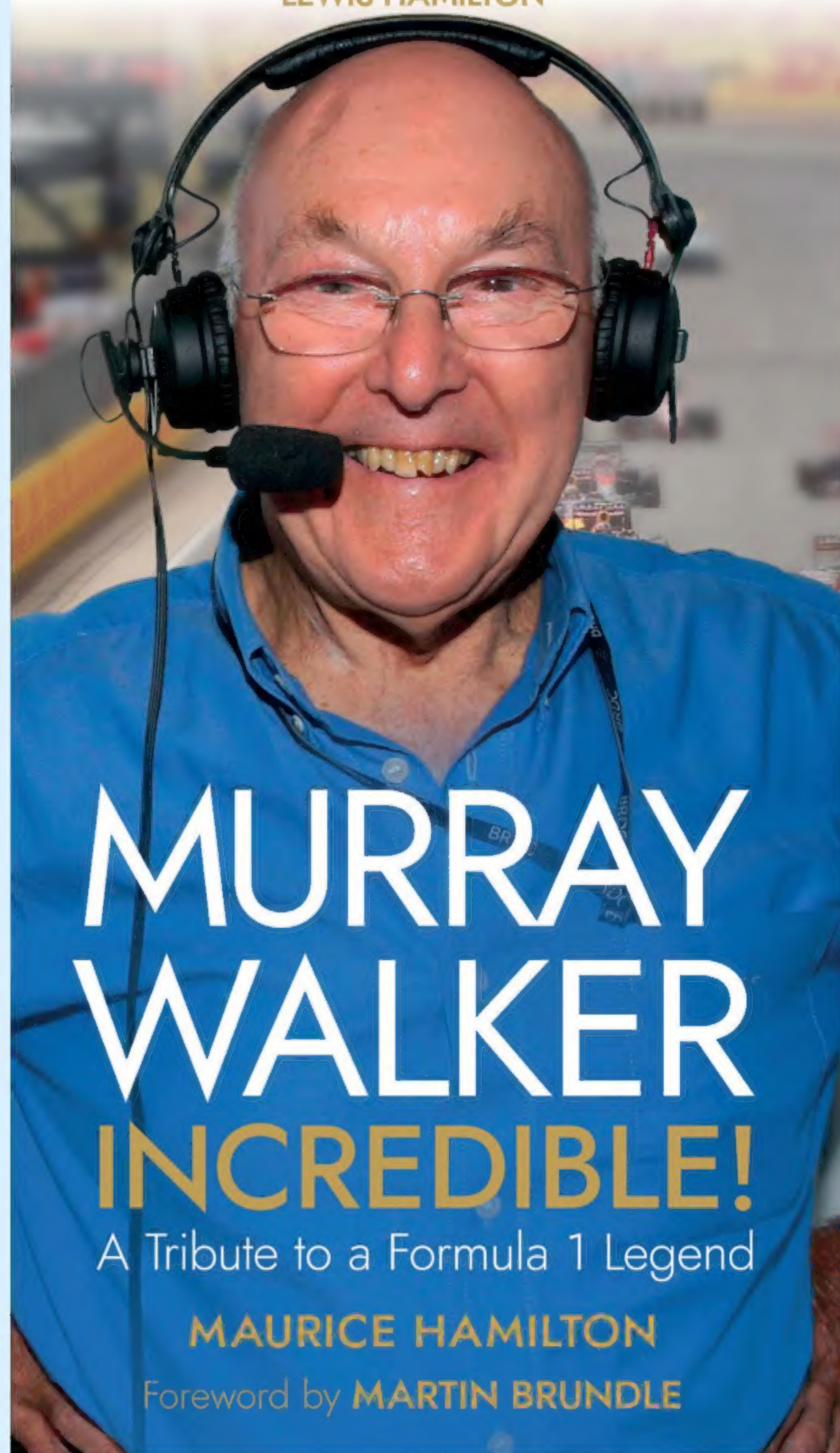
gradual progression of the fuel gauge.

Inside the 41.5mm diameter satin-finish titanium case there's a patented proprietary 124-piece movement and a self-winding mechanism with a 37-hour power reserve. The black leather strap is shaped to suggest the contours of bucket seats, and the timepieces feature quick-release spring bars enabling the strap to be changed easily. A selection of alternatives is available but the entry-level version comes with a spare NATO strap.



'The iconic voice of our sport and a great man.'

LEWIS HAMILTON



MURRAY WALKER: INCREDIBLE

Author Maurice Hamilton

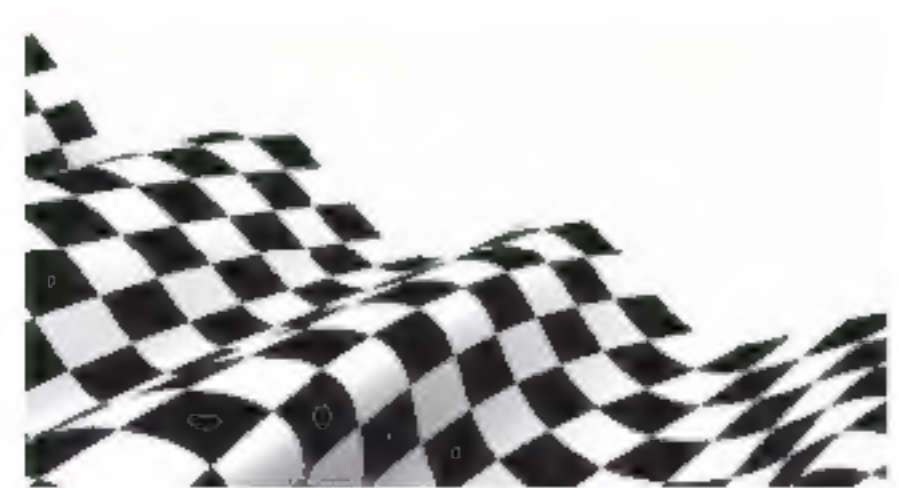
Price £20

penguin.co.uk

Murray Walker's death in March robbed motorsport of one of its most passionate advocates – indeed, a man whose infectious enthusiasm switched many fans on to racing in the first place. Murray's career as a journalist and broadcaster spanned nearly 70 years, from his first professional commentary job trackside at the 1949 British Grand Prix to the sad day he called time on his monthly *GP Racing* column at the age of 93. A long-time friend of and contributor to this magazine, Murray was no less than a national treasure.

Also a long-time *GP Racing* contributor, Maurice Hamilton has

crafted this affectionate biographical tome which offers a host of fond memories and stories (some never-before-told), including tributes from the great and the good of motor racing. Murray's loquaciousness is celebrated alongside the many hilarious 'Murrayisms' – spend that long talking at full throttle and there are bound to be a few slips of the tongue – and there's a fascinating insight into the quiet professionalism and hard work which underpinned the ability of a man who, in the words of one producer, could make a 5am milk round in Peckham sound as exciting as the Indy 500.



FINISHING STRAIGHT

THE FINAL LAP

@CoddersF1 facebook.com/gpracingonline



FLAT CHAT

{ FULL THROTTLE MUSINGS WITH STUART CODDLING }

PICTURES  motorsport IMAGES

THE UNSEEN COSTS OF F1 EXPANSION

We're all in this together. Some may recognise this as a song from *High School Musical* performed by a youthful Zac Efron and his ensemble, others as one of the more disingenuous slogans uttered by career politicians over the past decade-and-a-bit.

Axiomatically, of course, then as now, some are more in it than others.

The Formula 1 calendar is a case in point. Formulated by the alphas of the c-suite and above, a constituency generally unfamiliar with hard work; but lived by those with oil under their fingernails and bags beneath the eyes.

By the time you read this, the FIA's World Motorsport Council will have ratified a 23-race 2022 calendar. As is usual, over the preceding weeks sundry F1 websites splurged speculative versions of the schedule, the better to publish self-congratulatory crowings if they turn out to be right. In Sochi, the McLaren team principal Andreas Seidl, impeccably the diplomat, gently

batted questions on these 'stories' into the slips: "There are dates around at the moment which are not the same as the information we are having."

What we know for sure, at the time of writing, is that the calendar will begin in March and end in November, because F1 CEO Stefano Domenicali has said so. Inevitably this will mean more of the



It is the mechanics and other staff that are most affected by the ever-expanding F1 calendar



triple-headers which are rightly abhorred by those who must work all hours to put on 'the show'. The mechanics, catering crews, electrical riggers, etc – these people don't waft in at the last minute via private jet, they must arrive days before the action begins and don't get to turn left when they step onto the plane.

The Spa-Zandvoort-Monza triple-header was tight but do-able. Flyaway triple-headers are nothing less than cruel and unusual punishments, of which the forthcoming Mexico-Brazil-Qatar is a sadistic example. I've been on a plane when an F1 mechanic suffered a suspected deep-vein thrombosis and it was a highly unpleasant experience, one the big cheeses really ought to ruminate upon before signing off on such logistical abominations.

F1 is embracing the aim of being carbon neutral by 2030. Speed

the day we see Domenicali and his acolytes rowing across the Atlantic on a bamboo raft.

Those working at F1's coal face already struggle to maintain work-life balance since there is very little down-time between races, even between seasons. At the top level of motor racing, Christmas is an inconvenience. Beneath the gloss, F1 is littered with stories of burnout, early retirement and divorce. It shouldn't be like this.

"We mustn't neglect that we are a group of people and human beings travelling around the world," says Sebastian Vettel. "If we have 52 weekends in a year, we do 23 of those as races, it obviously gives you a very intense season. The objective should be we have a sustainable way to run our season, not only for our environment but also looking at the human resource. If you have so many people involved, the weekends are far longer than the Saturday/Sundays that we see on TV.

"I think drivers, we're on the lucky end. Most of them, whether it's engineers or mechanics, staff working in the team, they have a family or children that they want to look after. So, we must be very careful where we want to put our interests."

In F1 we're certainly all in it together – but far too many are more in it than others.

"WE NEED A WAY TO RUN OUR SEASON, FOR THE ENVIRONMENT BUT ALSO LOOKING AT THE HUMAN RESOURCE"

SEBASTIAN VETTEL

GP Racing has a podcast!

Search for 'Flat Chat with Codders' in your podcasting platform of choice.

AUTOSPORT INTERNATIONAL

15-16 JANUARY 2022 | NEC BIRMINGHAM

EUROPE'S BIGGEST MOTORSPORT EVENT IS BACK!

**THE RACING
CAR SHOW**

4 HALLS PACKED FULL OF ACTION

- AUTOSPORT STAGE & LIVE INTERVIEWS
- CELEBRITY GUESTS & AUTOGRAPH SESSIONS*
- ESPORTS ARENA SHOWCASING THE 24hrs OF LE MANS VIRTUAL
- 100s OF CARS ON DISPLAY INC. F1 CAR DISPLAY
- MEET CAR ENTHUSIASTS & DRIVING CLUBS
- SOURCE CAR PERFORMANCE PRODUCTS & ACCESSORIES
- PLUS ACCESS TO THE PERFORMANCE & TUNING CAR SHOW



3 SHOWS IN 1

**PERFORMANCE & TUNING
CAR SHOW**

**THE RACING
CAR SHOW**

**LIVE ACTION
ARENA**

Autosportinternational.com

SHOW PARTNERS



A
motorsport
NETWORK
COMPANY

*Available as a VIP ticket holder

RICHARD MILLE



CALIBER RM 72-01